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ABSTRACT

The period of the 1960's was a time of great escalation of numbers of students enrolled in postsecondary education in the state of Minnesota, but during the 1970's, enrollment growth has slowed considerably. In 1970 enrollment increased by over 5% and in 1971 the increase was slightly over 2%. In 1972, however, enrollments stabilized for the first time in over 20 years. This stabilization has caused educational administrators within the state to reconsider their plans for the future and to alter the direction of their priorities. Thus, this document addresses itself to recommendations for meeting Minnesota's present and future needs for postsecondary education. Specifically, the document deals with (1) financing postsecondary education in Minnesota; (2) assessing needs and providing new educational opportunities; (3) improving postsecondary education through educational resources and programs; and (4) improving postsecondary education through expanded cooperation and coordination. (HS)

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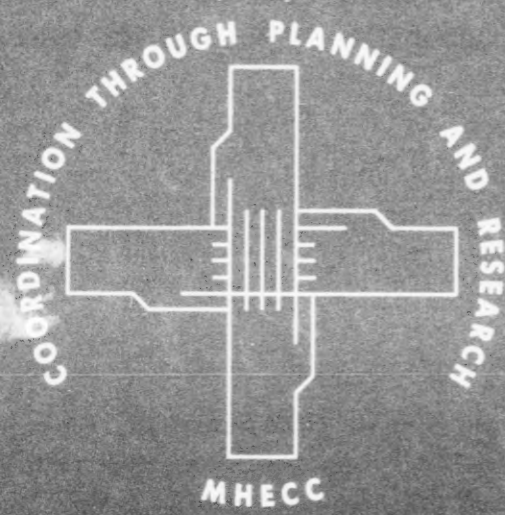

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REPORT TO THE 1973 MINNESOTA LEGISLATURE

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Recommended State Policy
for Meeting Minnesota's Present
and Future Needs for
Post-Secondary Education

COMPREHENSIVE PLAN—PHASE III
MINNESOTA HIGHER EDUCATION
COORDINATING COMMISSION
Suite 400 Capitol Square
550 Cedar Street
St. Paul, Minnesota 55101

January 1973

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INTRODUCTION

During the past decade, which was characterized by rapid growth in post-secondary enrollments, primary emphasis necessarily was focused on expansion to accommodate the dramatic increase in students entering post-secondary education. The growth has slowed, however, until in 1972 fall enrollments did not increase for the first time in over 20 years. Thus, Minnesota post-secondary education faces a period of adjusmtent — a period that promises new problems, new challenges, and new opportunities.

Minnesota residents have continued their historic support of post-secondary education and the state continues to provide post-secondary education to a comparatively large number of its residents. In 1970, the last year for which national data were available, Minnesota ranked sixteenth in total post-secondary enrollment in spite of its less than average population base. In terms of student enrollment in public post-secondary education, Minnesota ranked eleventh in total full-time and part-time enrollment.

The commitment to post-secondary education is reflected in Table I which compares Minnesota's appropriation for post-secondary education to the appropriations of other states. At a time when appropriations were stabilizing or actually declining in some states, Minnesota residents increased their appropriation by 21 percent from 1970-71 to 1972-73. Although this is slightly below the national average increase of 23 percent, the increase was the sixteenth highest nationally and it was the fifth highest of the nine Midwest states (seven big ten states plus North and South Dakota). On a per capita base, Minnesota's appropriation for post-secondary education in 1972-73 ranked third of the nine Midwest states and eighteenth nationally.

Table I

STATE APPROPRIATION FOR OPERATING EXPENDITURES OF POST-SECONDARY EDUCATION, 1972-73

	Percent Increase From 1970-71	Nine State Ranking	Per Capita Appropriation	Nine State Ranking
Illinois	8.5	8	$46.09	2
Indiana	21.0	5	39.86	7
Iowa	16.0	7	43.55	5
Michigan	21.5	3	46.08	3
MINNESOTA	21.25	4	44.71	4
North Dakota	18.25[a]	6	44.32	6
Ohio	24.75	2	30.19	9
South Dakota	7.25	9	33.78	8
Wisconsin	42.0	1	56.94	1
National Average	22.75	—	$40.78	—
Minnesota's Rank Nationally	—	16	—	18

[a]Based on Biennial Appropriation.

A rough index of a state's ability to pay for education is its per capita personal income, and an approximation of the effort expended is the percent of per capita income appropriated for post-secondary education. Table II shows that although the percent of personal income appropriated for post-secondary education in Minnesota ranks lower than per capita income of Minnesota residents, Minnesota ranks twenty-first nationally, which places the state above the median, and Minnesota compares very favorably among the nine Midwest states ranking third in the percent of personal income appropriated for post-secondary education. Table II also shows, however, that the per student appropriation for post-secondary education in Minnesota, although comparable among the nine Midwestern states, ranks below the median per student appropriation for the fifty states.

The fact that Minnesota exceeds the national average in per capita appropriation for post-secondary education, but ranks below the median of the fifty states in per student appropriation is partly explained by the relatively high proportion of Minnesota residents who enter post-secondary education. Thus, the contrast between these two statistics both indicates the historical commitment to post-secondary education by the citizens of Minnesota and documents the effort required of Minnesota residents to maintain the commitment.

A PERIOD OF ADJUSTMENT

During the 1970's enrollment growth in Minnesota post-secondary education has slowed considerably. This change in enrollment is documented in Table III which shows enrollment trends from 1967 to 1972. In 1970 enrollment increased by over five percent and in 1971 the increase was slightly over two percent. In 1972, however, enrollments stabilized. This is the first time in over 20 years that post-secondary education enrollments have not increased.

Table II

STATE APPROPRIATIONS FOR OPERATING EXPENSES OF PUBLIC HIGHER EDUCATION PER FULL-TIME ENROLLMENT, 1970-71, AND PER CAPITA PERSONAL INCOME, 1970

	State Appropriation	Nine State Ranking	Per Capita Personal Income, 1970	Nine State Ranking	Percent of Personal Income For Post-Secondary Education[a]	Nine State Ranking
Illinois	$2,348.44	1	$4,502	1	1.008	6
Indiana	1,798.49	2	3,781	5	0.922	8
Iowa	1,739.35	3	3,688	7	1.029	5
Michigan	1,556.77	4	4,059	2	0.981	7
MINNESOTA .	1,447.02	5	3,824	4	1.066	3
North Dakota ..	908.91	9	2,995	9	1.255	1
Ohio	1,324.43	7	3,972	3	0.649	9
South Dakota ..	1,097.53	8	3,165	8	1.062	4
Wisconsin	1,439.29	6	3,693	6	1.178	2
National Average	$1,646.26	—	$3,921	—	0.945	—
Minnesota's Rank Nationally ...	—	27	—	17	—	21

[a]Percent of personal income represented by state tax appropriations of operating expenses of post-secondary education.

Table III

LONGITUDINAL COMPARISON OF TOTAL ENROLLMENT IN MINNESOTA INSTITUTIONS OF POST-SECONDARY EDUCATION, FALL TERMS 1968-1972

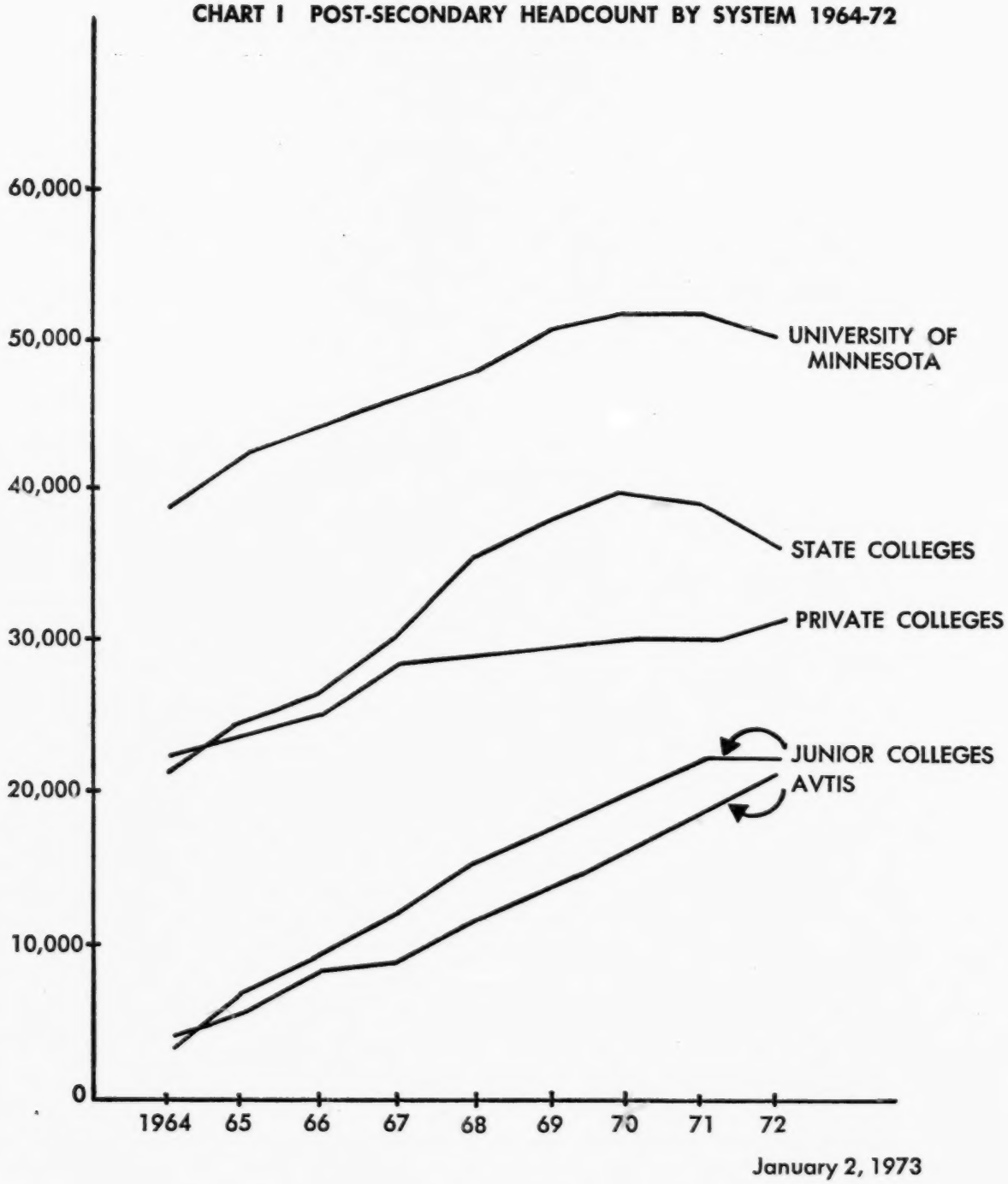
	Total Fall Enrollments				
	1968	1969	1970	1971	1972
State Junior Colleges	15,361	17,544	19,949	22,082	22,289
State Colleges	35,306	37,681	39,476	39,046	36,193
University of Minnesota	47,534	50,415	51,247	51,245	49,929
Area Vocational-Technical Institutes	11,401	13,435	15,969	18,357	20,939
Private Colleges and Professional Schools	29,042	29,560	30,089	30,039	31,155
Private Trade Schools[a]	5,600	5,000	4,629	6,400	6,500
Total Post-Secondary	144,244	153,635	161,359	167,169	167,005

[a]Estimated.

Enrollments at the state colleges and the University decreased in 1972 with the state colleges experiencing the largest decrease as indicated in Chart I. Enrollments at the area vocational-technical institutes and junior colleges have increased steadily since 1967 although enrollment growth at the junior college slowed significantly in 1972. The private colleges experienced increasing enrollments during 1972 reflecting in part the impact of the Private College Contract Program. (An institutional accounting of enrollment in Minnesota post-secondary education is provided in Appendix C.) It is important to note also that institutions and systems were affected differently by the enrollment situation in 1972. Most public collegiate institutions experienced enrollment downturns while the area vocational-technical institutes and many private colleges experienced increased enrollment. Thus, the mix of student enrollments in the various systems is of equal concern to the direction of total enrollment in post-secondary education.

An increasing proportion of students enrolled in post-secondary education are attending part-time. From 1968 to 1972 the proportion of part-time students has increased from 9.4 percent to 13.2 percent, representing an increase of over 50 percent. By system, the increase in part-time students is quite different. Junior colleges have experienced a 156 percent increase in the proportion of part-time students in the last five years. Part-time students at the University increased by approximately 50 percent. The state colleges, however, experienced only a 6.6 percent increase in the proportion of part-time students. While all the reasons for the relatively modest increase in the proportion of part-time students at the state colleges are not readily apparent, because they are located in communities with relatively small populations (with the exception of Metropolitan State College which still has a very small enrollment), the potential of the state colleges to attract

CHART I POST-SECONDARY HEADCOUNT BY SYSTEM 1964-72



commuting part-time students is limited. In addition, with only six state colleges, the state colleges are further limited in their potential to attract part-time students. These factors, coupled with the relatively high proportion of low income students traditionally enrolled at the state colleges suggests the need to provide for student costs in addition to tuition (i.e., maintenance expenses) to enable students to attend the state colleges. (See the Commission's recommendation on tuition policy in Section I, for a more elaborate discussion of the costs of post-secondary education.)

A final trend worth noting is indicated in Chart II. Although total head count and full-time enrollment has declined, the increase in part-time enrollment has been accompanied by an increase in full-time equivalent enrollment. This apparent paradox can be explained by two possible developments: an increase in the proportion of students in graduate level courses; and the possibility that institutions are increasing the number of credit hours for courses taught or that students are carrying heavier loads. The proportion and number of lower division students did in fact decrease from 1971 to 1972 while the proportion and number of upper division and graduate students increased. (For a detailed summary of enrollments in post-secondary education, see *Nineteenth Annual Survey of Fall Headcount Enrollments,* Minnesota Higher Education Coordinating Commission, December 1972.) Although there is no apparent trend in credit hours per course offered in post-secondary education, this situation warrants monitoring. The important development, however, is the relative decline of entering freshmen which has occurred.

LOOKING AHEAD

For the first time since the 85 percent enrollment goal was defined in 1968 (see *Proposal for Progress*), enrollments in post-secondary education in Minnesota have fallen below the defined goal. This enrollment downturn presents several problems. Not only are institutions forced to make adjustments as enrollments fall below expectations, but the outlook for the future years becomes even more problematic.

Indeed, as one looks eight to ten years into the future he becomes aware of the potential impact of the enrollment trends of the past few years. The 1968 enrollment goal was extended on the assumption that the state would make relatively even progress until in 1985, 85 percent of the citizens between the ages of 18 and 21 would be enrolled in post-secondary education. Even given the gradual progress towards the enrollment goal, enrollments in post-secondary education were expected to peak in 1980 and decline significantly between 1980 and 1985. In 1972, however, progress toward the enrollment goal ceased. If the experience of 1972 is extended into the future, it is likely that post-secondary enrollments will peak before 1980 and that the decline from peak enrollments through 1985 is likely to be much greater. Chart III demonstrates this possible development by comparing the 1968 enrollment goal to an extension of post-secondary enrollment trends from 1956 through 1972. The chart shows that the gap between the enrollment goal and actual enrollments is likely to widen in the coming years, unless and until significant changes occur in the economy, in the perception of students, in post-secondary education, or all three. The table also indicates the magnitude of enrollment decreases that could occur in post-secondary education in the not too distant future.

It should be emphasized that Table III does not contain a projection of post-secondary education enrollments. Rather, it merely extends the enrollment trends of recent years, and the extension for these trends is dramatically influenced by the change in enrollment that occurred in 1972.

Projecting enrollments is always hazardous because the enrollments that actually occur are affected by many factors that are not directly included in the

CHART II POST-SECONDARY HEADCOUNT, FTE, FULL-TIME AND PART-TIME 1964-72
(Proprietary School Estimates Not Included)

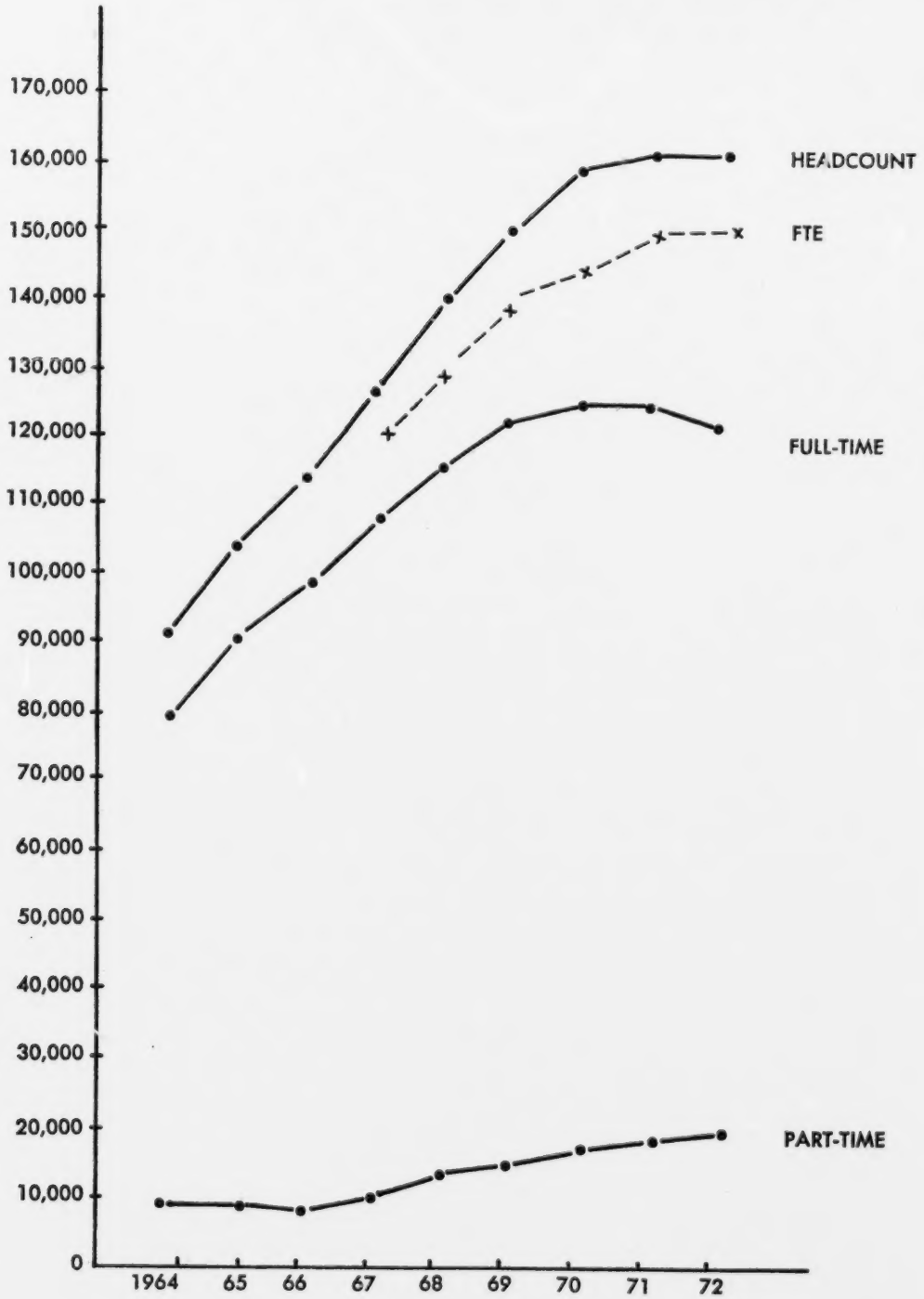


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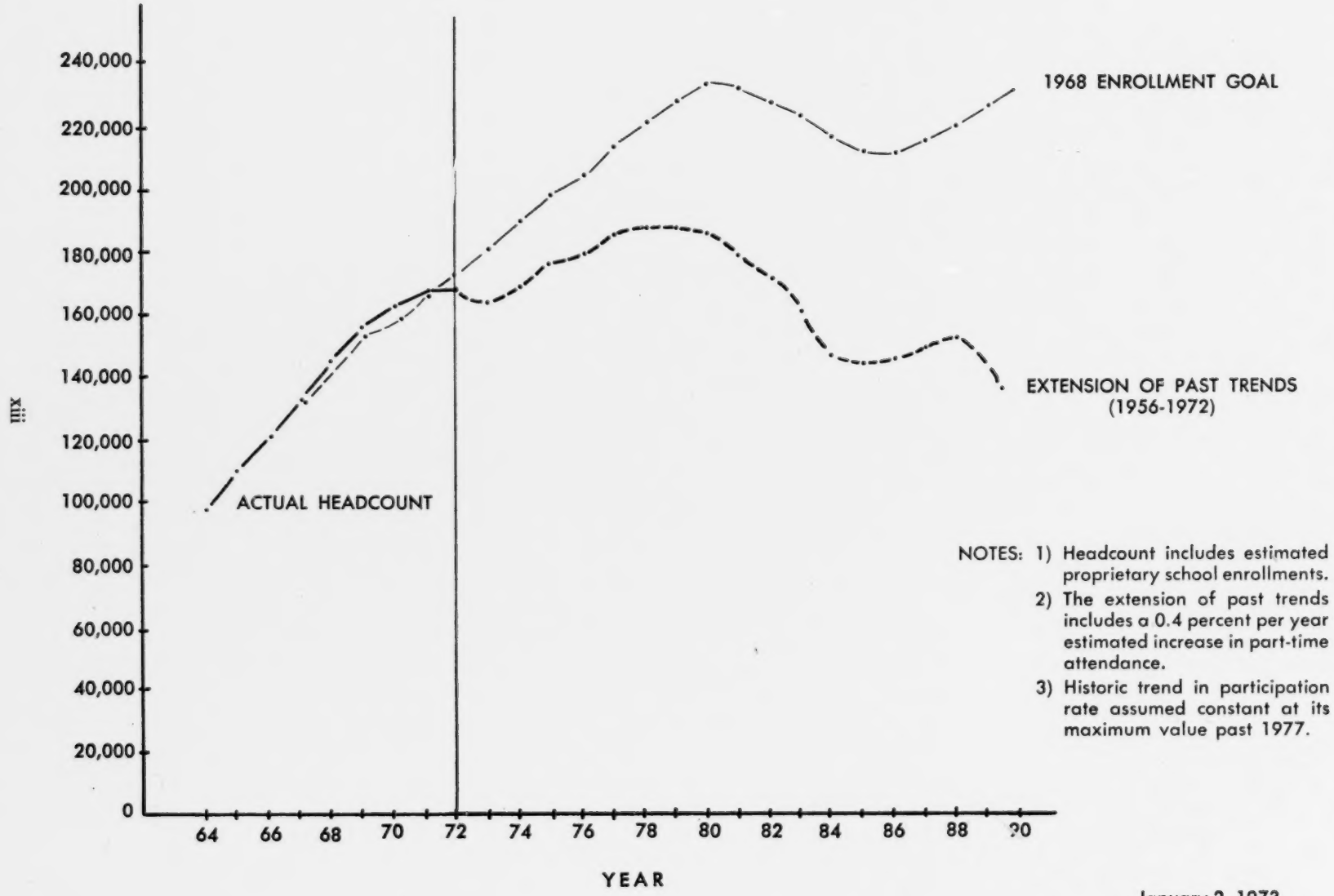
CHART III ENROLLMENTS IN POST-SECONDARY EDUCATION
(INCLUDING ESTIMATED PROPRIETARY ENROLLMENTS)



NOTES: 1) Headcount includes estimated proprietary school enrollments.
2) The extension of past trends includes a 0.4 percent per year estimated increase in part-time attendance.
3) Historic trend in participation rate assumed constant at its maximum value past 1977.

January 2, 1973

projection model, such as, changing student perception, changing job market conditions, changing economic conditions, and changing levels of support for post-secondary education from the federal and/or state government. At no time are projections more difficult than when trends are changing. This is true because it is seldom clear whether new patterns have been established or if an anomalous situation is occurring. In addition, it is not clear what the reasons for the changing trends are, nor is it often obvious precisely when the changing trends began. Finally, reversals often produce adaptive measures by the affected institutions, in this case post-secondary institutions, which can influence the changing trends either positively or negatively.

Nevertheless, enrollment projections are a necessary instrument for planning in that they can define the direction of probable change, display the parameters of potential impact, and help to define necessary policy guidelines that should be applied. The Commission is currently engaged in an intensive analysis of post-secondary education enrollment which will continue throughout the biennium. Periodic reports will be published as results are obtained with a preliminary report planned for March 1, 1974, analyzing past enrollment trends and indicating the probable direction for enrollment for each of the post-secondary educational systems in Minnesota for the immediate future.

A TIME OF OPPORTUNITY

As is clear from the previous discussion, Minnesota post-secondary institutions are confronted with different circumstances than they experienced during the past decade. Coupled with rising costs and a difficult fiscal environment, the problems of the future become even more perplexing. Institutional missions and programs have been defined in a period of growth and expansion that has extended over a number of years. As the situation changes, so do the challenges and the problems. Institutional direction cannot be suddenly changed without affecting the integrity of many existing programs and subverting over-all institutional quality. Change will take time, and certain diseconomies will inevitably exist for a brief period as institutions adapt to changing conditions. A recognition of the state to the adjustments facing many institutions of post-secondary education is essential. Of equal importance, however, is a commitment by the institutions to move decisively in adapting to the changing conditions.

Faced with constantly increasing enrollment in recent years, institutions had to struggle merely to accommodate the new students that were added each year. They have responded admirably. But in doing so, institutions have necessarily concentrated on expansion with little time to reflect on overall purpose, coordinated development, or plans for long range service to the citizens of the state. With the stabilization of enrollment, institutions can more effectively focus their attention on their present endeavors and the opportunities for expanding their role and the nature of the services they are providing.

Several avenues for this kind of development exist. The market for post-secondary education matriculants has traditionally been defined as those students recently graduated from high school. This market has been served well by post-secondary education as each year the number of high school graduates enrolling in post-secondary education increases. Yet many students desiring to move on to post-secondary education have not been able to do so. The excluded tend to be concentrated in low income families and from economic and socially disadvantaged situations. Several sections of this report contain recommendations designed to increase access to post-secondary education. (See, for example, Section I: Promoting Access to Post-Secondary Education; Section II: Meeting the Financial Need of Minnesota Students; Section IX: Meeting Post-Secondary Education Needs of Disadvantaged Students.) In addition, however, increasing access to low income students depends to a large extent on the commitment of the institutions

themselves. Not faced with severe pressures from increasing enrollments, the institutions will be in a better position to increase the number of low income students attending by reaching out to recruit more and by examining their existing program in terms of the needs of the disadvantaged student.

The lack of enrollment pressures will also provide the opportunity for post-secondary institutions to look beyond the traditional market for potential students. This will involve a reassessment of institutional purpose and mission in an effort to define broader roles that can be fulfilled. It is possible, for example, that post-secondary education can develop closer ties with business, government, industry, and other social institutions. In this era of rapid technological change, there is an ever increasing need for re-training and updating of professional skills. Although, post-secondary education has historically focused on providing entrance to the job market, it is possible that its role could be considerably expanded by assuming a greater responsibility for the maintenance of social and professional skills.

While post-secondary education may move to provide educational services to adults through their employers, they might also attempt to increase the educational services they are providing directly to adults. Post-secondary educational institutions currently provide educational opportunities for the adult population through a variety of avenues and programs. For the most part, however, these program offerings tend to be outside the mainstreams of the primary institutional thrust. As institutions attempt to broaden their markets and expand their educational mission, it is appropriate that they seek new ways to serve the adult population and attempt to define new and different programs that will bring their continuing education efforts into the mainstream of the educational program. Such an effort, however, will require careful planning and coordinated development among all post-secondary institutions. Obviously, it is not in the interest of the state to have every institution offering an external degree. Indeed, it may be more efficient and more productive to have one external degree program for the state that is offered cooperatively through the resources and special focuses of all the post-secondary systems in the state. The important first step is to identify the problem, and then to specify alternatives which through cooperative endeavor can provide an efficient and effective extension of post-secondary education to the adult population. This will require a re-examination of traditional delivery systems, an examination of how the budgetary process operates to finance post-secondary education and careful consideration of the cost that will be incurred and the benefits to be derived from an extension of post-secondary education to the adult population.

In summary, the decline in enrollments experienced by Minnesota post-secondary education in 1972 should be regarded neither as an indictment of post-secondary education nor as a portent of disaster. The reasons for the enrollment decline are complex and not immediately obvious, although the changing draft situation and the difficult economic conditions of recent years probably both had an impact. It is important that an attempt be made to more clearly identify the factors affecting post-secondary education enrollment and having identified them that they be incorporated into the planning efforts of the state and of the individual institutions. It is important to realize also, however, that post-secondary institutions will be faced with difficult adjustments during this period. They will require continued support to enable them to make the adjustments required during this difficult period. Through careful planning and coordinated-cooperative development it may be possible to turn today's problems into tomorrow's opportunities.

THE COMMITMENT REQUIRED

The title of this Report indicates the context of many recommendations of the Commission. The nineteen sections of the Report are organized into four sections as follows:

Part One: Financing Post-Secondary Education in Minnesota

Part Two: Assessing Needs and Providing New Opportunities

Part Three: Improving Post-Secondary Education through Educational Resources and Programs

Part Four: Providing Post-Secondary Education through Expanded Cooperation and Coordination

In addition, several appendixes are provided which contain supporting materials for the recommendations outlined in the main body of the Report.

Although each of the sections derive from a particular context and is directed to specific problems, taken together they have common themes. Rather than attempting to summarize each of the individual recomendations of the Commission, it is more appropriate to focus on key sections of the Report highlighting the priorities for post-secondary education during the next biennium. Recognizing the difficult fiscal climate, yet aware of the continued need for support of post-secondary education, the Report outlines steps to improve access and enrollments in post-secondary education, to improve the use of educational resources, and to improve the planning process for post-secondary education through expanded cooperation and coordination of all institutions and through improvements to the budgetary process used for post-secondary education.

Recognizing that equal financial access to post-secondary education in Minnesota is not yet a reality, the Commission recommends a substantial increase in State Scholarship and Grant-in-Aid Programs in order to promote equal financial access to post-secondary education. At the same time, the Commission recommends that the University, the state colleges, and the junior colleges should increase their tuition to equal 30 percent of instructional cost (which is the policy guidelines specified in *Meeting the Challenge*) and that students at area vocational-technical institutes should share in the cost of their education. The implementation of the tuition recommendation would generate the resources necessary to implement the recommended increase in student aid. The effect of these two recommendations is to redistribute the state subsidy provided to post-secondary education, providing relatively less subsidy to those students whose families who can afford to pay more to enable their children to enroll in post-secondary education and providing proportionately more of the state subsidy to students who cannot now afford to attend post-secondary education. It is important to emphasize that these are companion recommendations that should be considered together. To increase tuition without increasing aid to students would seriously undermine the financial base for post-secondary education, it would exclude even greater numbers of students from post-secondary education than now are excluded, and as a consequence, it would portend even greater future difficulties in the production of manpower for the state.

Recognizing that financial problems are only part of the problem faced by disadvantaged students, the Commission recommends further measures to increase access among disadvantaged students. These include recommendations to improve the education to disadvantaged students received at the elementary and secondary level, to improve counseling services in post-secondary institutions, and to establish a cooperative inter-institutional education center in the Twin Cities to help identify and motivate disadvantaged students to enroll in post-secondary education.

Impressed by the skyrocketing costs of education, the Commission also directed attention to the improvement in the use of resources by post-secondary education. Thus, one section of the Report reviews the Carnegie Report on *The More Effective Use of Resources* and by applying it to Minnesota, identifies several measures that institutions can explore to improve their effectiveness and efficiency. In addition, the Commission recommends the continuation and expansion of the inter-institutional television and the MINITEX library programs. Both of these programs are designed to minimize the cost of supporting educational resources used by post-

secondary education. Through the inter-institutional television program, it is possible to expand inter-institutional cooperation and course offerings, to reach students in a variety of settings, and to share among various institutions the products developed by an individual institution. The MINITEX library program has brought to the smallest library in the state the potential resources of the most complete library by establishing catalogues of library materials that are available throughout the state, by distributing these catalogues to institutions and communities throughout the state, and by developing mechanisms for delivering the library resources to those who need them.

The Commission recommends several steps to improve and expand cooperation and coordination in post-secondary education. After an extensive examination of post-secondary needs in Regions Nine and Ten, the Commission concluded that the most appropriate mechanism for addressing the needs of Rochester residents was to establish a consortium involving the cooperative efforts of the existing institutions in Regions Nine and Ten. Pointing to the improved cooperation that exists among junior colleges and area vocational-technical institutes, yet cognizant of enrollment trends and the availability of unused capacity at other public post-secondary institutions, the Commission recommends that in small communities that contain both an area vocational-technical institute and a junior college, the institutions should investigate the possibilities of merger in an effort to increase efficiency and reduce the long range costs of post-secondary education for those communities and for the state. In addition, the Commission recommends that plans for the expansion of the area vocational-technical institutes be reviewed by the Commission before proceeding with any construction at existing area vocational-technical institutes.

Because the program offerings of any post-secondary institution in Minnesota impacts on the offerings of other institutions, the programs offered by private institutions affect the need for programs that might be offered in public institutions. Recognizing the complex and diverse systems of post-secondary education in Minnesota and cognizant of how the various institutions affect each other, the Commission recommends that its coordination and program review responsibility be excluded to include all private institutions in order to improve the planning process. Finally, the Commission recommends that regional advisory councils be established in the state to identify regional needs, to advise institutions and the Commission in regard to those needs, and to serve as a catalyst for an awareness of the potential services that post-secondary educational institutions can provide their respective regions.

One of the most critical processes affecting post-secondary education is that related to the budgetary and appropriations process. Ultimately, it affects the determination of priorities for the state and the post-secondary educational programs that are offered by the state. At present, each of the public systems of post-secondary education uses their own budgetary process which leads to confusion and unnecessary complexity in the appropriations process. Recognizing this as a serious problem, the Commission recommends several steps to improve it. Uniform methods for determining instructional cost along with standard data elements for evaluating facility use are recommended for adoption by each of the public post-secondary educational systems. In addition, the Commission recommends that immediate efforts be initiated to develop a program-oriented budgetary system that will provide comparable data about institutional program offerings and budgetary needs to the Governor and the Legislature. This would reduce the confusion and minimize the complexity that presently exists in the appropriations process.

The recommendations outlined above are discussed in much greater detail in the body of the Report. In addition, many other recommendations are included which, although not discussed above, are addressed to important problems in

post-secondary education. The above discussion did, however, indicate the critical task before us. The priorities are clear; better planning through expanded cooperation and coordination and improved budgeting; more efficient use of our present resources; and the improvement of access to post-secondary education are the critical thrusts necessary.

Meeting Minnesota's post-secondary education needs in the years ahead will be a challenging endeavor. Rising costs coupled with the need to preserve and improve post-secondary education through the strengthening and appropriate modification of existing programs and the development of new approaches which reflect emerging needs and changing conditions will require a substantial increase in the state's investment in post-secondary education. The support provided by the citizens of Minnesota as outlined in the beginning of this Report must be continued and expanded. All of the citizens share in the benefits provided by the state's post-secondary education institutions and each of the citizens has a common stake in helping them to adapt to the changing conditions. We must begin today to prepare for the future. Only in this manner can we assure the continued provision of the post-secondary educational opportunities required by the citizens of Minnesota.

PART ONE: FINANCING POST-SECONDARY EDUCATION IN MINNESOTA

I. PROMOTING ACCESS TO POST-SECONDARY EDUCATION

In reviewing tuition for public post-secondary education as requested by the 1971 Legislature, the Commission early recognized that tuition charges were but one of the costs of attending post-secondary education. In addition to tuition, the student is faced with many other charges, including room and board, the cost of books, fees, clothing, transportation, and the many other expenses he faces in living from day to day. This, coupled with the fact that the student while he is in college is not generally earning the income he would be if he were not in college, indicated that tuition is a relatively small proportion of the total cost of attending post-secondary education.

It was also recognized that tuition policy was part of the much broader issue of how to finance public post-secondary education. It was not simply a question of the relative costs of post-secondary education to be paid by the student and the state. The problem was more clearly understood when it was realized that the state is making a substantial investment in post-secondary education by providing resources directly to students and directly to institutions. The essential question the Commission faced, then, was how to allocate these two forms of investment in a manner that would more effectively enable post-secondary education to meet the needs of the citizens of the state.

The Commission has considered a variety of proposals in its review of tuition policy for public post-secondary institutions. They included:

The continuation of present policy;

No tuition for the first two years of post-secondary education;

Tution waivers based on the ability of the student and his family to pay for post-secondary education;

Tuition charges based on the full-cost of instruction with student grants provided to those students with financial need;

and several other proposals. Many of these proposals, or variations of them, are being considered or are in the process of implementation in other states.

For each proposal the Commission was faced with the following questions:

1. To what extent and in what manner would the tuition policy affect student behavior as it relates to matriculation to post-secondary education;
2. To what extent would the tuition policy promote equal financial access to post-secondary education;
3. To what extent would the tuition policy provide a sound financial base for public post-secondary institutions;
4. To what extent would the tuition policy be responsive to the competing demands for public revenue;
5. To what extent would the tuition policy reflect the cost of obtaining an education — the cost to the state and the cost to the individual student;
6. To what extent would the tuition policy serve the needs of the state, the institutions, and the student;

The deliberations were further complicated by the fact that enrollment at the state collegiate institutions declined over the last two years, with the result that there are now approximately 5,200 vacancies among these institutions when compared

to their peak enrollments. In addition, although approximately 75 percent of high school graduates continued their education this fall, over 17,000 students did not. Furthermore, even though the greatest proportional enrollment of students from families with income under $9,000 is at the area vocational-technical institutes, the greatest number of students from the same income strata is enrolled in the state colleges, and over two and a half times as many students from these income strata are enrolled in the state collegiate institutions than are enrolled at the area vocational-technical institutes.

A basic question relevant to the issue of the tuition policy is for what reason should income from tuition equal anything less than the total cost of providing post-secondary education. In other words, why does the state use tax dollars to pay part of the cost of providing post-secondary education rather than simply relying on the student to cover such costs through payment of tuition in an amount equal to instructional costs? Clearly, the answer is that post-secondary education is of sufficient importance to the state and its residents to justify lowering the effective cost to the student in order to permit larger numbers of Minnesota residents to continue education beyond the high school without undue financial hardship.

It is equally relevant to question why any tuition is assessed to students. In other words, if post-secondary education is sufficiently important to justify payment of part of the costs of instruction from tax dollars, why should not all of the costs of instruction be paid by the taxpayer rather than by the student? The answer clearly is that the amount of tax dollars available for providing state services is limited and many students can afford to pay part of the costs of instruction through tuition.

It follows then that by subsidizing post-secondary education the state is seeking to make such education realistically available to a larger number of Minnesota residents than the number who could benefit from post-secondary education if the student were required to pay tuition equal to the full cost of instruction. Similarly, the state cannot justify paying the total cost of instruction from tax dollars in view of the fact that the needs and desires for state services exceed available tax dollars.

Given the objective of making post-secondary education financially accessible to as many Minnesota residents as possible and the condition of limited tax dollars with which to subsidize post-secondary education, the relevant question becomes in what manner should the state distribute its investment of post-secondary education to achieve the goal of providing financial access to post-secondary education for as many Minnesota residents as possible?

In the past, most of the state's investment in post-secondary education has been allocated to institutions in order to subsidize a significant portion of instructional costs and hence to keep tuition relatively low. Indeed, it was not until 1967 that the State Legislature began to distribute part of the state's investment in post-secondary education directly to students in the form of state student aids rather than to institutions.

At first glance, it might appear that subsidizing institutions with a view to keeping tuition low might represent an effective approach for making post-secondary education financially accessible to all Minnesota residents. Action of the 1967 Legislature establishing a state scholarship program recognized the fact that many students cannot continue education beyond high school without undue financial hardship even when tuition is low, since tuition represents only a small part of total costs which the student incurs.

By maintaining low rates of tuition without additional forms of student subsidies in substantial amounts, the state, in effect, is providing greater assistance than is necessary to permit some students to continue education beyond high school, but providing less assistance than is necessary for low-income students to pursue

post-secondary education. In other words, the student who could and would pay larger amounts of tuition is not requested to do so, and the student who does not have sufficient resources to meet the non-tuition costs of attending post-secondary education is granted less assistance than necessary for meeting the objective of making post-secondary education financially accessible to as many Minnesota residents as possible. Accordingly, the present policy of distributing most of the state's investment in post-secondary education to institutions and very little directly to students represents an inefficient and costly means of attempting to achieve the objective of making post-secondary education financially accessible to as many Minnesota residents as possible.

If sufficient resources were available, the Commission would favor a program of free tuition in all public post-secondary institutions with a large enough investment in student financial aids to assist every Minnesota resident for whom the non-tuition costs of attending post-secondary education represents a hardship. Since sufficient resources for financing such a program would not appear to be realistically available, the Commission believes that the funds available for post-secondary education should be distributed in a manner which will contribute to achieving the objective described above as efficiently as possible. Accordingly, the Commission recommends that the 1973 Legislature bring about a modest redistribution of the investment in post-secondary education by providing a substantial increase in the amount allocated directly to students with a corresponding decrease in the amount distributed directly to institutions. The effect of such a redistribution will be to increase tuition slightly permitting those students who can pay higher costs to do so and increasing the amount invested in the student aids significantly to provide greater financial accessibility for those students for whom meeting the costs of post-secondary education is a serious hardship.

The emphasis in the proposed tuition policy, therefore, is to provide additional resources to those students who cannot now afford to attend post-secondary education while providing the necessary resources for the effective financing of post-secondary education institutions in the state. The recommendation is not based on a determination of the subsidy provided to specific students (e.g., junior college students vis-a-vis Ph.D. students); nor is it based on the relative subsidy provided to the students from different income strata. Rather, it is based on a recognition that the majority of students can pay more than they are now asked to pay and that many students are not now attending post-secondary education because they cannot afford it.

When the Commission examined the subsidy provided the students in institutions of post-secondary education, however, it was faced with a perplexing problem. On the one hand, the students at junior colleges are asked to pay tuition if they are not enrolled in a vocational program. On the other hand, students at area vocational-technical institutes are not required to pay tuition. While it is recognized that students enrolled in vocational programs either at the junior colleges or at the area vocational-technical institutes are not required to pay tuition, it is not clear whether this policy derives from a substantive educational objective or whether it is a policy that attempts to maintain a disparity in tuition policy between the two systems. Based on the assessment of the discrepancy in tuition policy for junior colleges and area vocational-technical institutes and based on a determination that free tuition for the first two years of post-secondary education was not viable in the present fiscal climate, the Commission concluded that free tuition at the area vocational-technical institutes was no longer appropriate.

A somewhat different problem confronted the Commission when it examined the tuition charges at senior institutions. The tuition charged students at the lower division was a much higher percentage of the cost of instruction than was the tuition charged students in the upper division, in professional programs, and particularly in graduate programs. In spite of the fact that tuition charges vary by level and

program at the University,[1] the same generalization obtains. The Commission felt that this policy tends to inhibit access by requiring lower division students to pay a disproportionate amount of instructional costs. Although the Commission does not anticipate that this policy can be changed immediately, it felt that certain immediate steps can be taken to correct the problem and that gradually tuition, as a percent of instructional costs, should be equalized for each level of the senior institutions.

In reviewing the tuition policy for public post-secondary institutions in Minnesota, the Commission arrived at the following conclusions:

1. A primary objective of the state's program of investing in post-secondary education should be to permit as many Minnesota residents as possible to attend an institution appropriate to his needs and interests without undue financial hardship.
2. While providing post-secondary education at low rates of tuition is an effective means to provide access to post-secondary education for those students who can pay the non-tuition costs of pursuing post-secondary education without undue hardship, providing educational opportunities at low tuition rates does not address the problem of lower income students who need assistance in meeting the non-tuition costs of post-secondary education.
3. In order to facilitate achievement of the objective more efficiently, the state should substantially increase the proportion of its post-secondary investment which is distributed directly to students.
4. If providing the substantial increase in funds distributed directly to students through student aid programs cannot be accomplished by increasing the total investment in post-secondary education, the relative amount distributed to institutions should be reduced and redistributed to students.
5. In order that every Minnesota resident will have a realistic opportunity to pursue the type of post-secondary program appropriate to his needs, interests and qualifications, all forms of post-secondary education should be made financially accessible to students from all socio-economic groups in order that each student can select the type of program to enter on the basis of the nature of the program and not on the price charged for the program.
6. The current practice of making vocational education available without tuition while other forms of post-secondary education require tuition is discriminatory in that it implies that all forms of post-secondary education should be made available to students from higher income families while only vocational programs need be available to students from lower income families.
7. If limited financial resources require that the effective costs of post-secondary education (tuition plus other costs minus student aids) cannot be kept low for all students, the differential subsidy should be based on the ability of the student to pay rather than on the type of institution or program which the student enters.
8. The current practice of charging tuition for students of age 21 and over and not charging tuition for students under age 21 in area vocational-technical institutes is dysfunctional; charging higher tuition for a student of age 21 than for a student of age 20 serves no useful educational or social purpose.
9. The relationship of tuition charges to instructional costs for lower division students at the senior institutions tends to inhibit access by requiring these

[1]The state colleges were unable to provide cost information by level of instruction. Their tuition charge is equal for all levels, however, and assuming that their instructional costs increase for each level, it is inferred that lower division students at the state colleges also are paying a disproportionate cost of instruction.

students to pay a disproportionate share of the total instructional costs of the institutions.

10. Tuition policy as one of the complex of issues that affect the finance of post-secondary educational institutions should be continually reviewed by the Commission to determine if it is enhancing the accomplishment of post-secondary educational goals.

In keeping with the above conclusions, the Commission submits the following recommendations:

1. *In order to promote equal financial access to post-secondary institutions by making resources available to students who cannot now attend, the Commission recommends that the State Scholarship and Grant Programs be increased from $7,330,000 during the 1971-73 biennium to $22,650,000 for the 1973-75 biennium. As a result of the cumulative affects of commitment for continuing awards, this represents a net increase in the request for student aid of approximately $8,000,000 for the biennium.*
2. *In recognition of the fiscal constraints faced by the state and its taxpayers, but cognizant of the need for continued support of public post-secondary education, the Commission recommends that the policy of the state on tuition rates in public institutions be that income from tuition be a minimum of 30 percent of instructional costs (as represented by direct and indirect expenditures for instruction and departmental research), at the University, state colleges, and for non-vocational programs at the junior colleges. The Commission further recommends that each student at area vocational-technical institutes and in vocational programs in the junior colleges should pay a reasonable and justified proportionate share of the instructional cost. Accordingly, the Commission requests that the State Board for Vocational Education, in consultation with representatives of each institute, assess their instructional costs among area vocational-technical institutes and report to the Higher Education Coordinating Commission by January 1, 1973 on a plan to implement the above recommendation. After consideration of this proposal, the Higher Education Coordinating Commission will report to the Legislature on a plan for area vocational-technical institutes.*
3. *Recognizing that the proposed tuition policy will increase expenses for students who are currently enrolled in post-secondary education and who are not eligible to apply for state aid, the Commission recommends that $4,000,000 be appropriated, during this biennium only, to be distributed to students at public post-secondary institutions who require assistance to offset the tuition increase in order to continue their education.*
4. *As an additional impetus to equal access to post-secondary education, the Commission recommends that immediate studies be initiated by the state colleges and the University to establish tuition charges for lower division, upper division, graduate, and professional students that will result in tuition charges, as a percent of instructional costs, to be more in balance for each of these levels. It is recommended that the State College System and the University should study this tuition level policy and report to the Higher Education Coordinating Commission by January, 1974 in regard to the plans and problems in the future implementation of the policy.*
5. *In order to determine the extent to which this policy enhances or inhibits equal access to post-secondary education and the extent to which it contributes to the effective financing of Minnesota post-secondary education, it is recommended that the Higher Education Coordinating Commission continue to review the recommended tuition policy.*

In summary, the review of present tuition policy led the Commission to a broader consideration of the financing of public post-secondary education in Min-

nesota. The primary objective of the Commission's recommendations was to promote equal financial access to post-secondary education while providing a sound basis for financing institutions. Thus, rather than recommending dramatic changes in the policy, the Commission chose to recommend a minor modification which through continued review and revision as appropriate, will enable the state to gradually approach its goal of providing post-secondary education to all who desire to attend. Specifically, the Commission recommended a small reallocation of the state investment in post-secondary education that would result in a substantial increase in subsidy provided directly to students, thereby making post-secondary education accessible to those who cannot now afford it. Realizing, however, that tuition policy is a complex issue that both affects and is effected by a variety of circumstances, the Commission recommends the continued review of tuition policy to determine the extent to which it is contributing to the realization of state post-secondary educational goals.

The following resolution was adopted by the Minnesota Higher Education Coordinating Commission on January 11, 1973:

> *The Commission recommends that the policy of the state with respect to area vocational-technical institutes and vocational courses in state junior colleges be that income from tuition be expected to equal 10 percent of instructional costs and that projected income based on this policy be considered by the Legislature in making appropriations.*

In passing this motion, members of the Commission agreed that (1) the state board responsible for the institutions affected by the recommendation should be allowed to develop a plan and establish the tuition rates to fulfill the policy and (2) income from tuition should serve to reduce the amount of state appropriation rather than the community contribution in the case of area vocational-technical institutes.

II. MEETING THE FINANCIAL NEED OF MINNESOTA STUDENTS

Each new generation enters a society more technologically advanced and more socially and economically complex. Manpower, the supply of human talents and skills, must be trained to meet ever changing needs. The role of and need for post-secondary education in the future will assume new dimensions of importance. The productivity of the people, individually and collectively, will depend largely upon the type and extent of their educational training. Therefore, the Commission reaffirms its conviction that the state must adhere to the principle of equal opportunity and must pursue the policy of meeting the post-secondary education needs of an increasingly larger proportion of Minnesota residents.

Equality of opportunity for post-secondary education is desirable for more fundamental reasons than its contribution to economic growth, but its importance to the state's economy should not be minimized. Incentive and opportunity are two keys to growth. Unnecessary and unwarranted situations of foreclosed opportunities retard growth. Only when each individual in our society has the opportunity to develop his potential fully and has the opportunity to utilize his talents and skills to the utmost can we achieve maximum output from available human and non-human resources.

Recognition of the democratic principle of human rights led to recognition that the policy of equal opportunity for post-secondary education is just good economic sense for a free and competitive society. "No task before our nation," said President Kennedy, "is more important than expanding and improving the educational opportunities of all our people. The concept that every American deserves the opportunity to attain the highest level of education of which he is capable is . . . a traditional ideal of democracy."[2]

Aspirations and potential for higher education are present at all income levels. Yet today, and more than we like to admit, economic status and social privilege control the door to post-secondary educational opportunity. How, then, can we move toward a more open-door policy of encouraging students with ability, regardless of socio-economic status, to develop their talents and potential skills to full capacity?

The Commission agrees with the precepts that "early identification of competent students" and "then motivating them with counseling that will result in increased motivation for continued education"[3] are essential ingredients of a sound educational program. But, further, the Commission submits that (1) increasing the supportive resources for financial aids and (2) utilizing the most equitable method of distributing such resources to those demonstrating the need for them are the vectors proven to be the most effective in lowering, or removing entirely, the economic barrier to post-secondary education.

Despite the diversity and level of support of student financial aids, they are yet inadequate to fulfill the objective of offering to those academically qualified but financially handicapped realistic opportunity for post-secondary education. Rising costs have priced many of our able young men and women out of the education marketplace. But it is a differentiated marketplace; some who are priced out of the high-cost educational institutions may seek training in the low-cost ones; others, with little or no resources, are priced out of the educational marketplace entirely. Such under utilization of human resources greatly affects the productivity of our state's citizens.

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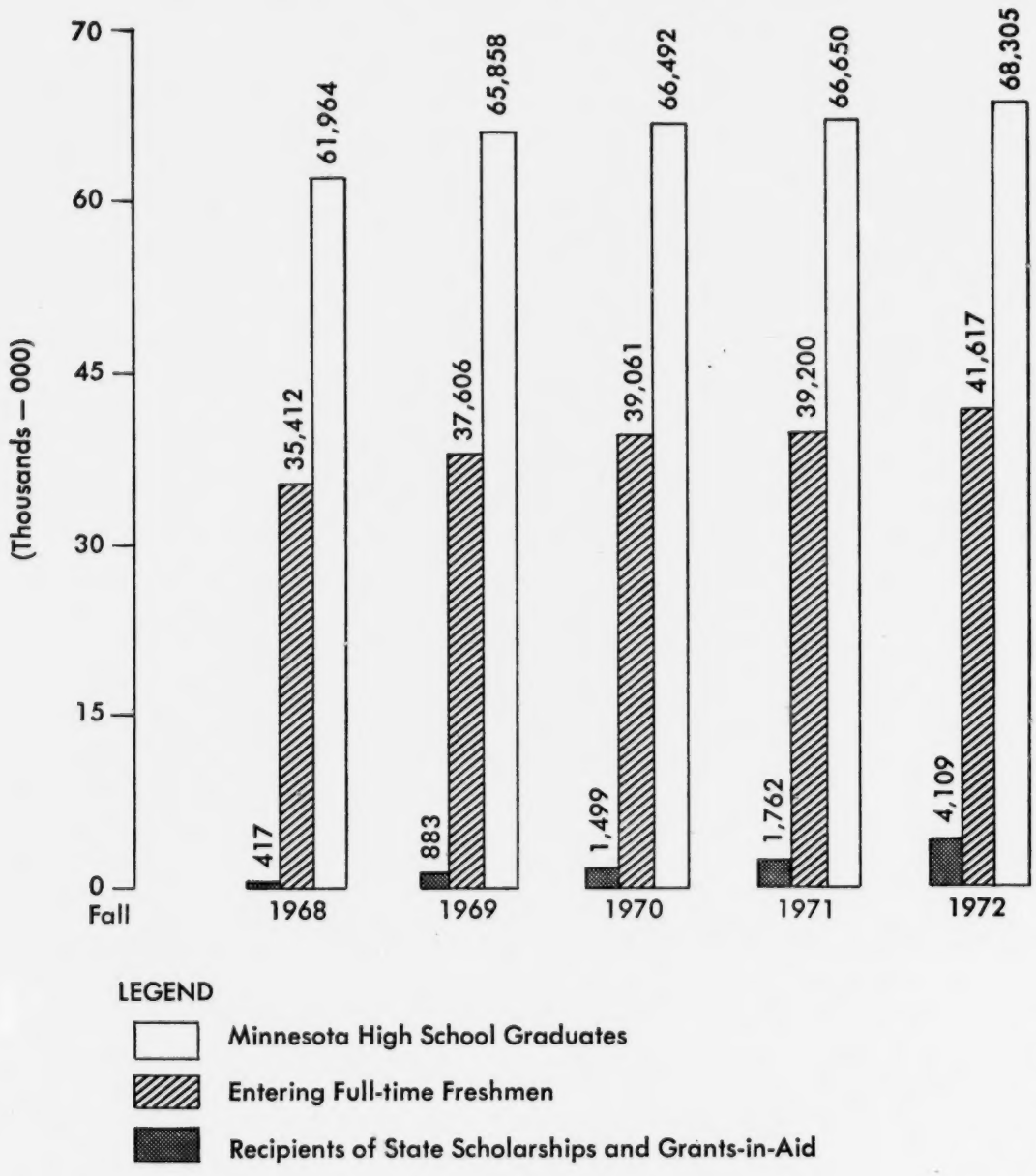
[2]President John F. Kennedy's message to the United States Congress, February 6, 1962.
[3]Ralph F. Berdie. "Assumptions Underlying Scholarship Proposals," *College and University* (Fall 1958): 86-87.

Scholarships and Grants

By establishing state scholarships in 1967 and state grants-in-aid in 1969, the Legislature recognized the importance of making post-secondary education more accessible to the financially disadvantaged. Increased support of these student aid programs by the 1971 Legislature expressed its conviction that the state must continue to pursue the policy of improving accessibility to post-secondary education. These first steps toward providing equality of opportunity for post-secondary education are highly significant. But much more needs to be done if Minnesota is to achieve the objective of post-secondary education for all who can benefit. Combined appropriations for scholarships and grants-in-aid for Fiscal Year 1973 provided partial financial assistance to only six percent of 1972 graduates of Minnesota secondary schools.

COMPARISON OF MINNESOTA HIGH SCHOOL GRADUATES, ENTERING FRESHMEN IN MINNESOTA EDUCATIONAL INSTITUTIONS AND RECIPIENTS OF STATE SCHOLARSHIPS AND STATE GRANTS-IN-AID



Currently, 23 states support need-based student financial aid programs for undergraduate residents of the state to attend either public or non-public institutions of post-secondary education. Table I shows how these states rank in terms of per capita support of need-based student aid programs. For the biennium 1971-73, Minnesota's state scholarship and grant-in-aid programs were supported at an annual average cost of $.97 per capita, 13th in rank among states providing similar student aid programs. Although the average per capita appropriation for student aids in 10 states was below that of Minnesota, it should be observed that Minnesota's average annual support was less than one-half the mean per capita appropriation of all states in the biennium 1971-73.

Table 1

Per Capita Ranking of Financial Need-Based Student Aid Funds in Existing State Programs 1971-73[a]

Rank	State	Total Appropriation	Ratio of Average Annual Dollars to 1970 Population
1	Vermont	$ 4,900,429	$5.51
2	Pennsylvania	117,958,000	5.01
3	New York	151,600,000	4.17
4	Illinois	90,800,000	4.09
5	New Jersey	46,558,488	3.21
6	Rhode Island	3,609,940	1.90
7	Indiana	16,188,164	1.56
8	Michigan	26,891,360	1.52
9	Iowa	8,525,000	1.51
10	Ohio	31,000,000	1.46
11	Massachusetts	16,000,000	1.41
12	California	46,884,409	1.18
13	Minnesota	7,330,000	.97
14	Wisconsin	8,086,500	.92
15	Maryland	6,270,600	.80
16	Connecticut	3,022,745	.50
17	Oregon	2,000,000	.48
18	Washington	3,120,147	.18
19	Kansas	1,289,633	.29
20	West Virginia	725,000	.20
21	Texas	4,000,000	.21
22	Tennessee	1,200,000	.16a
23	Florida	1,460,000	.11
	Total	$599,420,315	2.00b

[a]Based on one year (1972-73) appropriation.
[b]Based on total population for 23 states with comprehensive programs. This represents 73.5% of total U.S. Population, 1970.

[4]Adopted from Joseph D. Boyd, *1972-73 Comprehensive State Scholarship/Grant Programs* (Deerfield, Illinois: Illinois State Scholarship Program, 1972), pp. 2-3.

The distribution of initial state scholarships and grants-in-aid to undergraduate students in Minnesota post-secondary institutions is shown in Appendix F.

To make post-secondary education financially available to a greater number of Minnesota residents will require substantially larger appropriations for both scholarships and grants-in-aid.

The Commission recommends that the 1973 Legislature continue its effort toward the goal of assuring that post-secondary education becomes financially available to all qualified Minnesota residents by appropriating $9,175,000 for the State Scholarship and State Grant-in-Aid Programs for Fiscal Year 1974 and $13,475,000 for Fiscal Year 1975.

The Commission's estimate of the need for non-family support of Minnesota residents in post-secondary educational institutions in Minnesota was derived through a careful analysis of (a) current enrollments in systems of post-secondary education in Minnesota, (b) the distribution of family income of students within systems, (c) a family's ability to pay towards educational expenses from a given income and (d) current price tags on post-secondary education by system. The basis for and the computation of this projected need is presented in Appendix D.

From Table V of Appendix D, it is estimated that Minnesota residents who enter Minnesota educational institutions directly from high school as full-time students expend $70,743,945 their first year for tuition, fees, books and maintenance. Of this amount, students and their parents or guardians are able to pay $47,633,410 (67%) from current income. They must look to other resources to provide the balance needed to meet educational costs — $33,110,535 (33%).

Present policy, enacted by the 1971 Legislature, prescribes that a state scholarship or state grant-in-aid shall not exceed one-half of the applicant's demonstrated need. Full funding for first-year scholarships and grants by this formula would require a minimal appropriation of $16,000,000 for new or first year awards. Although the Commission affirms its belief "that the state should provide sufficient funds to meet at least one-third of the demonstrated need for financial assistance of the members of each of the state's high school graduating class who seek entrance to post-secondary education,"[5] the Commission recognizes that appropriations of over $10,000,000 per year to support new scholarships and grants in addition to continued support of renewal awards is not a realistic expectation for the next biennium. Nevertheless, the Commission affirms its previous endorsement of the primary purpose of student aids and recommends that appropriations provide for about one-sixth of the demonstrated need of each entering class or $5,000,000 for new awards for each year of the biennium, 1973-75.

The Commission proposes that appropriations for new or first-year awards be $1,000,000 for State Scholarships and $4,000,000 for State Grants-in-Aid for each year of the biennium, 1973-75. Distribution of the proposed appropriation would be as presented in Table 2.

Table 2

	Fiscal Year 1974			Fiscal Year 1975		
	New Awards	Renewal Awards	Total Awards	New Awards	Renewal Awards	Total Awards
Scholarships .	$1,000,000	$2,175,000	$3,175,000	$1,000,000	$2,875,000	$ 3,875,000
Grants-in-Aid.	$4,000,000	$2,000,000	$6,000,000	$4,000,000	$5,600,000	$ 9,600,000
Totals ..	$5,000,000	$4,175,000	$9,175,000	$5,000,000	$8,475,000	$13,475,000

The 1971 Legislature approved the Commission's recommendations that (a) the amount of a state scholarship or grant-in-aid should not exceed one-half of a student's demonstrated need for non-family support and (b) to increase the maximum of an annual award to any one student from $800 to $1,000. The former action provided a more equitable relationship between a student's need and his award; the latter action recognized the increased cost of post-secondary education and made it possible to provide assistance equal to one-half of a student's need at any public institution of post-secondary education in Minnesota.

The Commission recognizes that the cost of post-secondary education has risen during the current biennium and that it is expected to rise during the next biennium. Moreover, the Commission's recommendations pertinent to tuition policy will result in increased tuition charges at all publicly supported post-secondary institutions. With the increase in tuition and other costs of post-secondary education during the next biennium, the present $1,000 maximum for an award will not provide one-half of the demonstrated need of some students at the University of Minnesota.

[5] *Meeting the Challenge: Recommendations for State Action in Meeting Minnesota's Needs for Post-Secondary Education* (St. Paul, Minnesota: Minnesota Higher Education Coordinating Commission, January, 1971), p. 11.

In recognition of increased costs in both public and private post-secondary institutions and to ensure that a state scholarship or grant-in-aid can meet one-half of a student's demonstrated need for non-family support in a public post-secondary institution,

the Commission recommends that the maximum annual amount of a state scholarship or state grant-in-aid be increased from $1,000 to $1,200.

Loans

The continuing rise in costs of post-secondary education heightens the barrier to the educational goals of ever increasing numbers of Minnesota students. While a relatively large segment of our adult population continues to be unemployed, the opportunity for part-time employment for those students who must depend largely on this resource to meet their educational expenses is substantially reduced. Increasingly, students have been forced to pay a greater share of the cost of post-secondary education from future income, rather than current resources, through loans.

When families are unable to pay the increasing costs of education from current income and liquidation of assets, even at great sacrifice, it is the student who must assume these costs with borrowed funds. During Fiscal Year 1972, 31,711 Minnesota residents borrowed $33,888,634 to finance the costs of post-secondary education under terms of the Federally Insured Student Loan Program. The amount borrowed by students and their families from other sources is estimated to be in excess of $10,000,000 in Fiscal Year 1972.

To assess the need for additional student loan resources in Minnesota, the Minnesota Higher Education Coordinating Commission contracted with Cresap, McCormick and Paget, nationally recognized fiscal consultants, to study the Federally Insured Student Loan Program in the state of Minnesota. The findings of this study were essentially that at present the program is serving Minnesota residents very well. This study indicates that less than two percent of the students who applied for these loans were rejected by lending institutions. Therefore, the conclusion is that the program is very effective under present conditions.

One disturbing factor is prominent in the consultant's report. All assumptions concerning the projected ability of the Federally Insured Student Loan Program to meet student's needs are predicated upon no significant change in the money market. Any change in the prime interest rate and/or relative liquidity of financial institutions may exhibit adverse effects on this program. Upward movement of the prime interest rate tends to make student loans less attractive to lending institutions, even considering the market adjustment bonus, and may siphon off available student loan funds into more fiscally attractive areas. Declining liquidity ratios may force reductions in student loans, as financial institutions may feel that priority must be assigned to their traditional customers at the expense of student loans. This possibility cannot be ignored, because the major portion of loan volume is concentrated in relatively few banks and savings and loan associations. One lender alone provided 25 percent of the total student loan funds under the Federally Insured Student Loan Program during the academic year 1971-72. Changes in the money market which would lead this and other lenders to significantly reduce their participation in the Federally Insured Student Loan Program would leave a large number of student borrowers without funds. Should this occur, it is doubtful that other lenders, faced with similar conditions, would increase their participation in the Federally Insured Student Loan Program.

In summation, the Commission concluded that as conditions stand in the fall of 1972, the Federally Insured Student Loan Program is effectively meeting the needs of Minnesota residents who require these funds. A major change in the money market is apt to upset this rather delicate balance and these conditions should be monitored so that necessary adjustments can be made.

III. TOWARD MORE EFFECTIVE USE OF RESOURCES

Throughout the deliberations on tuition policy, the Commission has been troubled by two conflicting concerns: (1) if a larger share of the responsibility for meeting the rising costs of post-secondary education is placed on the state, the apparent problem of generating more tax revenue to support state services becomes intensified, but (2) if a larger share of the responsibility for meeting the rising costs of post-secondary education is placed on the students, many prospective students may be discouraged from pursuing education beyond the high school and an increasing number of Minnesota residents will be denied the opportunity to develop their talents through post-secondary education. Neither simply increasing tuition in order to avoid increasing tax revenue required to support post-secondary education nor simply increasing state support in order to hold tuition constant seems an adequate response to the complex problem of meeting the rising costs of post-secondary education. Accordingly, the Commission also has addressed attention to the costs of post-secondary education with a view to assessing the feasibility of curtailing continuing increases in expenditures for post-secondary education.

Must the costs of post-secondary education and the amount of funds required to support post-secondary education continue to increase? All available evidence suggests an affirmative response to this question. There is no hope of holding the costs of post-secondary education constant without either seriously limiting the access of Minnesota residents to post-secondary education opportunities or significantly impairing the quality of post-secondary education. The reasons for this fact are made abundantly clear in the report on the recent national study of the costs of post-secondary education by the Carnegie Commission on Higher Education.[6]

Can the rate of increase in the costs of post-secondary education be reduced? The Carnegie Commission has suggested that the rate of increase in costs can be reduced and has proposed several means for accomplishing the reduction. The Higher Education Coordinating Commission believes that the rate of increase in Minnesota must be reduced and recommends implementation of the Carnegie proposals as follows:

Reducing the Number of Students in Post-Secondary Education at Any One Time

The Carnegie Commission suggests that the number of students in post-secondary education institutions at any one time may be reduced by (1) accelerating programs in order to reduce the total time required for the average student to achieve his post-secondary education objective, and (2) reducing the number of reluctant attenders in post-secondary education. The Commission agrees with the Carnegie Commission that the amount of time required for students to complete most post-secondary education programs can be reduced. Chancellor Mitau, of the State College System, recently recognized the fact that too much of the instruction at the collegiate level duplicates that which is taught in high school. In addition, some of the course work presently required for completion of programs would not appear to be essential to the objective of these programs. On the other hand, the Commission does not see any significant change in the numbers of students in post-secondary education institutions by efforts to reduce reluctant attenders.

Accordingly, the Commission recommends that all Minnesota institutions and systems of post-secondary education undertake immediate efforts to reduce the time required for completing post-secondary education programs of all types by at least 15 percent and wherever possible by 25 percent.

[6]The Carnegie Commission on Higher Education, *The More Effective Use of Resources: An Imperative for Higher Education* (New York: McGraw Hill Book Company, June, 1972).

Savings in current operating expenditures for post-secondary education from implementation of this recommendation are estimated to be approximately 10 percent per year.

Achieving Better Utilization of Physical Facilities

The investment required for physical facilities to increase the capacity of post-secondary education institutions can be reduced through achieving more complete utilization of existing facilities by increasing the hours and days on which facilities are fully utilized and by structuring academic calendars and programs in such a way as to achieve the fullest possible utilization of facilities at all times of the year.

Accordingly, the Commission recommends that all institutions and systems of post-secondary education make any scheduling adjustments feasible for achieving more effective use of physical facilities and that decision to expand the physical facilities of institutions be based on a careful assessment of needs including alternative means for effective use of existing facilities.

Creation of Any New Ph.D Programs

Most advanced graduate programs require a reasonably high level of financial support. Undue proliferation of high cost programs is unnecessarily expensive. While establishing some additional advanced graduate programs may be in the best interests of the state, the need for additional advanced graduate programs is limited and decisions to establish any new advanced graduate programs must be based on adequate demonstration of need for the program and careful assessment of the cost implications. While these factors are obviously associated with Ph.D programs, they also apply to many other advanced graduate programs. Accordingly, the Higher Education Coordinating Commission proposes to grant favorable review of proposed new instructional programs at the advanced graduate level only under very special circumstances during the next biennium, and

the Commission recommends that (1) institutions proceed with deliberate care in deciding to propose new instructional programs at the advanced graduate level and (2) the Legislature proceed with appropriate caution in appropriating funds to support new programs at the advanced graduate level.

Achieving Minimum Effective Size for Post-Secondary Education Institutions

By analyzing the relationship of per student costs and size of institution or campus enrollment, the Carnegie Commission has demonstrated that institutions with less than certain minimum enrollments tend to be more costly than larger institutions. The Carnegie Commission also found that savings in per student costs diminish significantly when institution enrollments continue to grow beyond the minimum enrollment required for achieving a favorable cost-benefit ratio. The minimum and maximum enrollments for various types of institutions or campuses are recommended by the Carnegie Commission to be as follows:

	Minimum Enrollment		Maximum Enrollment	
Type of Institution	FTE	Headcount	FTE	Headcount
Doctoral Granting Institutions[1]	5,000	5,900	20,000	23,500
Comprehensive Colleges[2]	5,000	6,000	10,000	12,000
Liberal Arts Colleges[3]	1,000	1,100	2,500	2,700
Two-Year Institutions[4]	2,000	2,500	5,000	6,200

[1]Includes institutions such as Twin Cities campus of University of Minnesota.
[2]Includes institutions such as Minnesota state colleges.
[3]Includes institutions such as Morris campus of University of Minnesota.
[4]Includes institutions such as Minnesota state junior colleges and area vocational-technical institutes.

Comparison of the size of Minnesota institutions of post-secondary education with the ranges proposed by the Carnegie Commission suggests that while only a few Minnesota institutions exceed the upper limit of the recommended enrollment

ranges, many Minnesota institutions are well below the bottom of the recommended ranges. Although achieving the minimum enrollments recommended for all institutions represents a desirable development in terms of per student cost-quality factors, achieving the recommended institutional size for all institutions may not be appropriate in terms of the need to make post-secondary education opportunities geographically accessible to all Minnesota residents.

Previous studies of the Higher Education Coordinating Commission of factors associated with college attendance have demonstrated a positive relationship between proximity of post-secondary education opportunity and student propensity to continue education beyond the high school.[7] In other words, a higher percentage of students who reside within commuting distance of post-secondary institutions enter post-secondary institutions than the percentage of students who reside outside the commuting area of any institutions.

In the judgment of the Higher Education Coordinating Commission, the desirability of extending the benefits of post-secondary education to all segments of the Minnesota population outweighs the savings which would accrue to the state by maintaining only those institutions which can meet the recommended minimum enrollments. Accordingly, the Commission believes that the policy guidelines of maintaining some kind of public post-secondary education institution within 35 miles of every Minnesota community with a population of 5,000 or more, as recommended to the 1969 Legislature,[8] is an overriding objective which will require maintaining some institutions with enrollments less than the recommended minimum size.

On the other hand, economies which can result from institutional size should be achieved when doing so does not limit access of Minnesota residents to post-secondary education. New institutions should not be allowed to proliferate unnecessarily. Existing institutions should achieve the recommended minimum size whenever feasible and the state should continue to support existing institutions of less than the recommended minimum size only to the extent that such institutions are currently needed and providing geographical accessibility or if they are meeting other demonstrated needs.

The Commission recommends that a policy of maintaining only those institutions that can achieve sufficient size to provide quality instructional programs at the lowest feasible cost guide further state action insofar as this policy does not conflict with the goal of providing geographical accessibility to all Minnesota residents. The Commission further recommends that the policy related to maintaining institutions with enrollments of less than the recommended minimum size be continuously reviewed.

Raising the Student-Faculty Ratio

The Carnegie Commission suggests that *caution* should be applied when increasing the student-faculty ratio. The Carnegie Commission urges caution because (1) the student-faculty ratio rose (the number of students per faculty member increased) during the last decade and (2) far too little is known about the impact of student-faculty ratio on quality of instruction. Accordingly, the Carnegie Commission suggests that plans to raise the student-faculty ratio should be made on a case-by-case basis reflecting assessments concerning the impact of such changes on a campus-by-campus and department-by-department basis. Since raising the average student-faculty ratio by one would reduce the costs by about 3/10 of one percent per year, raising the student-faculty ratio should be accomplished to the fullest extent possible without sacrificing educational quality.

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[7]Richard C. Hawk et al, "Rates of College Attendance in Minnesota," *Minnesota Higher Education* (St. Paul: Minnesota Higher Education Coordinating Commission, March, 1970).

[8]Minnesota Higher Education Coordinating Commission, *Proposal for Progress: Guidelines for State Policy and Comprehensive Planning of Post-Secondary Education* (St. Paul: Minnesota Higher Education Coordinating Commission, January, 1969), p. 14.

Accordingly, the Higher Education Coordinating Commission recommends that all institutions and systems assess opportunities for raising the student-faculty ratio and that systems and institutions experiment with larger student-faculty ratios in some institutions and programs in order to determine the affects of modest increases in student-faculty ratios on the quality of education.

Re-examining the Faculty Teaching Load

The Carnegie Commission has concluded that reductions in faculty workload which occurred during the last decade have tended to rectify situations in which inordinately heavy workloads prevented even the most able and conscientious teacher from achieving desired effectiveness. The Carnegie Commission also has concluded that the faculty workload may now be increased slightly in some instances without impairing effectiveness. In reaching this conclusion, the Carnegie Commission recognized that assessments of faculty workload must be based on the total effort which must be extended by faculty members and not classroom hours alone. Studies have shown that faculty members often work longer than the normal 40 hour week of the American work force as a whole.

Accordingly, the Higher Education Coordinating Commission recommends that each of the systems and institutions carefully assess each individual situation with a view to identifying any opportunities for achieving savings through modest increases in faculty workload.

Improving Management and Budgeting Processes

The advantages of improved institutional management and more effective utilization of the budget process for guiding decisions and relating expenditures to achievement of objectives are obvious. The Higher Education Coordinating Commission concurs with the Carnegie Commission's assessment that improving cost effectiveness in post-secondary education can be facilitated through adequate provision for well-trained, middle-management personnel and through budgetary processes which generate better information for decision-making and which relate expenditures more directly to objectives.

The Higher Education Coordinating Commission recommends that the Legislature stimulate and support efforts to improve the budgeting process at the institutional system and state level and that the Legislature and the systems make adequate provisions for effective middle-management personnel.

Creating More Off-Campus Alternatives

Minnesota already is making significant progress in developing educational programs which include a high proportion of off-campus experiences, the most notable examples being the Minnesota Metropolitan State College and the University of Minnesota's "University Without Walls" program. Similar approaches are being planned for other institutions. While considerable savings would appear to be possible through greater utilization of such concepts as the "open university" and "credit by examination," relatively little is known about the ultimate costs and impact of such efforts on educational quality.

The Higher Education Coordinating Commission recommends that the educational quality and costs of alternative off-campus approaches be carefully evaluated and that such approaches be implemented and continued to the extent that quality can be maintained without increasing per student costs.

Establishing Consortia Among Institutions and Merging Some

While the benefits or previous experiences with consortia appear to be mixed, some consortia, such as the Tri-College University in Fargo-Moorhead, offer sig-

nificant potential for increasing service without corresponding increases in cost through the cooperation of several institutions. Additional discussion and recommendations on consortia appear in a later section of this report.

The question of merging institutions is highly sensitive since people associated with any institutions regard consideration of merging their institution with another institution as a serious threat. System officers express similar concerns as was evidenced by the reaction of Department of Education personnel to recommendations of the Region Nine and Ten Study Consultant Panel in favor of merging the Rochester Area Vocational-Technical Institute with the Rochester State Junior College. The political ramifications of any proposal to merge institutions are obvious and the question must be approached with extreme care. Nonetheless, the possibility of merging some institutions should not be dismissed simply because of the apparent difficulties in such efforts.

Accordingly, the Higher Education Coordinating Commission recommends that opportunities for achieving savings and/or improving the educational setting by combining two small institutions into one larger institution be realistically assessed and that all institutions explore every feasible opportunity for achieving the advantages which may be available through consortia or other cooperative arrangements.

Preserving Quality

Sacrificing educational quality in order to reduce the cost of post-secondary education represents a false savings which will lead to the deterioration of Minnesota's ability to meet post-secondary education needs of its residents effectively. Accordingly, the Higher Education Coordinating Commission concurs with the Carnegie Commission's assessment that the temptation to achieve short-run savings which reduces the long-run effectiveness of post-secondary education should be firmly resisted.

In accordance with the view, the Commission recommends that the Legislature not attempt to achieve savings by unwarranted reductions in funds for (1) necessary maintenance, (2) library expenditures for new books and journals, (3) student aid and (4) salaries, as such reductions in faculty salaries lead to excessive turnover.

Facilitating Institutional Cost Effectiveness

The nature of institutions of post-secondary education institutions and the decision-making structure which pervades these institutions creates significant difficulties in developing sensitivity to and placing responsibility for cost effectiveness. The Carnegie Commission deliberation of the situation deserves repeating:

> The campus is a peculiar type of institution. It has been run, in its academic aspects, quite properly, with a professional mentality toward standards. But the academic profession has been one whose members do not directly subject their wares to a market test. Other professionals (doctors, lawyers) also have a professional mentality, but they are more in touch with the market for their services. The faculty, in a great majority of academic institutions, is in control of or has strong influence over teaching loads, courses, research projects, class sizes, admissions, grades, degrees — over its own work loads and its own products. The administration, however, raises the money. The people who spend the money do not raise it and the people who raise it have only modest influence over how it is spent. This disjunction is a source of problems. It is hard both to assess responsibility (to the administration or to the faculty?) and to affect results (by global actions or by specific controls?). The campus is like an independent artisan economy from the point of view of producing services but is a collective enterprise in terms of securing income — and the chief artisans have tenure. The president has little control over the component outputs or the totality to which they add up, but he must take the

totality and present it for the highest price he can get in a market where there is often only one big purchaser — the state. It is not like a corporation with hierarchical control over employees nor like a government agency. Comparisons with either are false and can lead to unwise policies.

Current attempts to solve some problems peculiar to higher education include an effort to turn the communal artisan endeavor into a public utility enterprise — to determine its prices, specify its output, assign its customers to it by public fiat: to impose more and more specific financial formulas controlling income in detail; to set work loads and class sizes: to manage the enterprise by remote control. There are several things wrong with this: (1) Outputs are difficult to specify and quantify. (2) Many services are performed by many different people in many different combinations — the diversity of effort is almost infinite. (3) Morale is at the essence of the enterprise and it is founded on self-determination of effort and self-generated goals. (4) The campus can become a perfect environment for the "Good Soldier Schweik" who follows all the rules but cleverly sabotages the whole endeavor.

The problem is complex. The essence of the solution lies in conditions that (a) draw forth the maximum of voluntary effort at a high level of competence and (b) achieve effective use of resources. The artisan approach generally satisfies (a). Faculty members do work hard (a few abuses aside) and some of their contributions in teaching and research have been superb. This kind of performance can neither be controlled in detail nor coerced. It has been a productive form of mild anarchy — internal free enterprise. The spirit of the enterprise can be killed by driving the public utility approach farther and farther into the details of the operation. We support continued faculty responsibility for the essentials of academic life.[9]

> *The Higher Education Coordinating Commission agrees with the Carnegie Commission that state policies must be designed to solve the problem of effective use of resources in spite of the difficulties suggested above and gives its full support and endorsement to the following proposed solution:*

(1) general tests of performance and general formulas for support by the state;

(2) greater reliance on the market, such as:

(a) Money received through the hands of the students, as now is the case of private colleges and universities — let them conduct the search for lower costs, higher quality and greater diversity.

(b) Auxiliary enterprises placed on a self-supporting basis or turned over to independent enterprises.

(c) Research funds given out by panels of experts on a project by project basis in competition with each other

(3) greater self-discipline within the academic enterprise, a greater sense of responsibility for effective use of resources — much has been left to the conscience of the academic community but this conscience now needs better ways to inform itself and to assert itself. We believe it is important to preserve the essential quality of and thus the essential faculty responsibility for academic life. It is also important to realize what different kinds of external pressures both can and cannot do — they can guide but they cannot coerce effort. The Procrustean bed is not a productive instrument in academic life: and yet we have been moving in that direction.[10]

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[9]The Carnegie Commission on Higher Education, *The More Effective Use of Resources: An Imperative for Higher Education* (New York: McGraw Hill Book Company, June, 1972), p. 21.

[10]*Ibid.*, pp. 22-23.

Given the nature of the academic enterprise as described above, achieving the self-discipline necessary for adequate attention to cost-effectiveness will require specific action.

In order to aid institutional self-discipline, the Higher Education Coordinating Commission endorses and recommends the following Carnegie Commission proposals:

(1) Improving the budget-making process. We suggest that the budget assign total costs to each endeavor (including rentals for space and equipment — there is little incentive to save on what are "free" goods); that it consolidate consideration of capital and operating budgets so that the impact of each on the other can better be seen and trade-offs can be made, for example, in considering year round operations; that it look at the long-term and not just the individual year; that it concentrate more on outputs and less exclusively on inputs, and particularly more on "value added."

(2) Obtaining better data and making it more widely available within the academic community. It is particularly important to have (a) global cost and output data among institutions of comparable quality and with comparable endeavors and (b) specific cost and output data among departments within the same institution. Quality is of the essence in academic life and it is hard to measure; but among carefully selected institutions and within the same institution it may be assumed to be sufficiently equal so that comparisons can be made — it is easier to compare quality than it is to measure it. But even within these restricted limits great care must be taken in making comparisons; they are a starting point but not the end point of proper consideration. The best measure of output is student credit hours — for example, student credit hours per $1,000. "Data pools" can be helpful — like the ACE studies of quality at the graduate level. Regional associations also can be helpful in creating them and some, in particular the SREB in the South and WICHE in the West, are. The U. S. Office of Education has a particular responsibility in regard to cost and output data. Consortia, as among certain private colleges in Pennsylvania, can also be helpful in gathering and exchanging data. The information system is now very poor in higher education.

(3) Maximizing flexibility in creation of space and in making commitments to people. This assists the process of necessary change. New projects should be on a trial basis; faculty members with tenure should be a reasonable proportion of the total instructional staff; early retirement on a part-time or full-time basis should be possible; young faculty members should be hired with regard to their adaptability to future assignments — the young faculty members hired in 1972 will retire in the year 2012; certain of the positions vacated should be recaptured for central reassignment; and so forth.

(4) Setting a quota of "liberated" money each year, as suggested above, perhaps 1 to 3 percent. This money, taken from old assignments either on an across-the-board or selective basis, can then be used for reform, for new projects, for meeting the more volatile career and academic interests of students. Some old activities should be stopped altogether.

(5) Having a competent central staff with adequate authority.

(6) Creating incentives to save. The state can share savings with the campus rather than demand them all and thus make them disappear. The faculty can be assured benefits from savings, for example, some proportion might be assigned to salary increases or library purchases; and also the students — for example, more money for student aid or lower tuition increases. Faculty and students will need to share in some advisory role in budget making for these incentives to be fully effective.

The only way to keep faculty salaries ahead of the cost of living, to improve the library, to get more money for scholarships, to keep down increases in tuition, to get academic reform may be to make other adjustments in resource use. Hard choices must be made. Incentives can help both in making them and gaining their acceptance.

(7) Convincing the faculty of the need to be more cost conscious. The severity of the new situation is not as yet always fully appreciated. The 1960's were an unusual period; not par for the academic course. Salaries cannot keep rising so fast on a comparative basis; teaching loads may have to be increased instead of reduced; facilities and amenities cannot be so significantly improved; new Ph.D programs cannot so readily be added.[11]

Achieving the Proper Role of the State

Decreasing the rate of increase in the costs of post-secondary education without curtailing educational quality must necessarily remain a responsibility of the institutions and systems. However, the state can assist institutions and systems with such efforts and can take actions which will facilitate accomplishment of the desired objectives. In setting out to bring about a reduction in the rate of cost increases, the state must take the necessary care to be certain that its policies and actions will facilitate rather than impede institutional efforts to achieve the desired results.

The Higher Education Coordinating Commission commits itself to pursuing the actions recommended by the Carnegie Commission for states and coordinating agencies, and recommends that the Legislature, the Governor, and other State Agencies follow these recommendations which are stated in the Carnegie Commission report as follows:

The states (and their coordinating councils) base budgets on broad formulas that consider quality and quantity of output and costs among comparable institutions; provide bonuses for accelerated degree programs; set standards for optimum size of each type of campus; share savings with institutions; support private institutions to a reasonable extent and in reasonable ways; encourage year-round operations if only by looking at year-round utilization rates among campuses when deciding where new construction is most justified; provide for differentiation of functions among systems and campuses; support the extension of the D.A. degree; inaugurate "open" universities on a state or regional basis; and look at the general situation and leave the detailed adjustments to the campus.[12]

[11] *Ibid.*, pp. 23-24.
[12] *Ibid.*, p. 25.

IV. IMPROVING THE BUDGETING AND FACILITIES PLANNING PROCESS IN PUBLIC POST-SECONDARY EDUCATION IN MINNESOTA

In *Meeting the Challenge* the Commission recognized the need to move toward an improved budgeting system for public post-secondary education. Pointing out that as higher education becomes more complex, improved bases for developing budget requests by the systems and making appropriations to the systems by the Legislature are required, the Commission recommended several steps to improve the budgeting appropriation process. In another section of this report ("A Period of Adjustment in the Appropriations Process") the Commission has discussed the importance of coordinating the accounting and budgeting process of the systems to provide comparable information to the Legislature in order to improve decision making in the appropriations process.

That this problem is of concern to the Legislature is obvious from the Bill of Particulars from the 1971 Legislature which instructed the Commission, in part, to attempt "to develop a uniform method of identifying the applicable cost factors for the three systems" in the determination of instructional cost. High priority was assigned to this project by the Commission because it recognized the debilitating effect that the lack of comparable information was having on the appropriations process. The efforts of the Commission were substantially successful in that it was able to develop, with the assistance of representatives of each of the systems, a common method for determining instructional cost. The broad principles, as specified below, were reviewed and endorsed by the Higher Education Advisory Council.

The Commission recommends, therefore, that determination of the cost of instruction in all post-secondary education institutions and systems be based on computations in accordance with the following guidelines:

I. The following shall be deleted from cost computation:

A. Building and Land Costs (including leases).

B. All costs reimbursed by special appropriation supplements identified as catch-up monies for specific deficiencies.

II. The following shall be included in cost computation:

A. All costs reimbursed by special appropriation supplements for new or developing institutions.

B. All costs reimbursed by special appropriation supplements for specific instructional programs.

C. Equipment costs (investment; 15 year amortization or single year write-off).

D. Library costs (amortized in the year in which the expenditure is made).

E. Direct costs of instruction and departmental research (all instructional and departmental research expenditures of the departments, colleges, schools, and instructional divisions of the institution).

F. Indirect costs of instruction and departmental research. To be determined in the following manner:

1. Direct expenditures for sponsored programs are subtracted from total sponsored programs' revenue to determine assignable sponsored programs' revenue.

2. Total expenditures for libraries, physical plant operation and maintenance, and other educational and general expenditures

(not listed under direct expenditures for instruction and departmental research) are added. These are total indirect expenditures.

3. *Assignable sponsored programs' revenue is subtracted from total direct expenditures to derive non-recoverable indirect expenditures.*

4. *Non-recoverable indirect expenditures are assigned to expenditures for instruction and departmental research, public service (non-sponsored programs), and auxiliary enterprises in proportion to their total direct expenditures or by use of other appropriate allocation methods.*

The recommended approach for computing instructional cost can and should be refined with the adoption of specific procedures for implementation of the Guidelines. The Commission is confident that the systems will cooperate in this endeavor with the result that the method of determining cost of instruction will be improved further. In the meantime, use of the Guidelines will provide for computing instructional cost on a comparable basis for all institutions and systems.

Another important element in the planning and budgeting process is assessments of the use of facilities. Unfortunately, a variety of procedures have been used to measure, evaluate, and plan for the use of facilities in post-secondary education. In an effort to develop standard definitions and procedures for Minnesota, the Commission sought to have the data elements developed by the National Center for Higher Education Management Systems (NCHEMS) of the Western Interstate Commission for Higher Education (WICHE) adapted for use by Minnesota post-secondary institutions. The result of this process was the approval by the Higher Education Advisory Council of the Standard Data Elements, Definitions and Procedures for Facilities outlined below.

Accordingly, the Commission recommends that the following Standard Data Elements and Definitions for Facilities and the specified procedures will be applied by all Minnesota post-secondary institutions and systems:

1. *The use of Standard Date Elements and Definitions in Facilities and Space Utilization*

   The following data elements and definitions relating to facilities and space utilization are featured from the Data Element Dictionary: Facilities, and from the glossary in Manual Seven of the Higher Education Facilities Planning and Management Manuals, technical reports of the National Center for Higher Education Management Systems at WICHE:

TITLE	*DESCRIPTION*
Gross Area	*The sum of the floor area (square feet) — included within the outside faces* of exterior walls for all stories, or areas which have floor surface.*
Net Assignable Area, Facility	*The sum of the floor areas (square feet) available for assignment to an occupant,** except those areas assigned to Custodial, Circulation, Mechanical, and Construction areas.*
Physical Condition	*Rating of the physical condition of the facility:* *(a) Satisfactory* *(b) Needs major renovation* *(c) Needs remodeling* *(d) Should be razed*

*Disregarding cornices, pilasters, buttresses, etc., which extend beyond the exterior wall face.
**Including types of spaces functionally usable by an occupant.

TITLE	DESCRIPTION
Functional Suitability	*Rating of the appropriateness of the facility for the assigned activity:* *(a) Satisfactory* *(b) Needs major renovation* *(c) Can accommodate other programs with remodeling* *(d) Hopeless for present or future program*
Room Type	*A code to classify room types:* *(a) Classroom* *(b) Laboratory* *(c) Office* *(d) Study* *(e) Special-use* *(f) General-use* *(g) Supporting* *(h) Medical care* *(i) Residential* *(j) Pro-rate* *(k) Non-assignable* *(l) Un-assignable*
Actual Stations	*Number of stations at which people may be assigned.*
Average Room Utilization Rate (AvRUR)	*The average number of hours per week a group of rooms is scheduled for use.* $AvRUR = \frac{(Scheduled\ Weekly\ Room\ Hours)}{(Number\ of\ Rooms)}$ *AvRUR includes only scheduled Weekly Room Hours (WRH). As a matter of convention, Average Room Utilization Rate (AvRUR) is used with respect to the total number of classrooms (or class laboratories) in an institution (or for some aggregation of rooms with different Station Counts or of different types).*
Average Section Size (AvSS)	*The average number of students in a group of class sections. For the purpose of these manuals, the Average Section Size is derived by dividing the total Weekly Student Hours (WSH) taught in a group of rooms by the total Weekly Room Hours (WRH).* $AvSS = \frac{(Total\ Weekly\ Student\ Hours)}{(Total\ Weekly\ Room\ Hours)}$ $AvSS = \frac{(WSH)}{(WRH)}$
Average Station Occupancy Ratio (AvSOR)	*The average proportion of Stations used when a group of rooms is scheduled for use. As a matter of convention, Average Station Occupancy Ratio (AvSOR) is used with respect to the total number of classrooms (or class laboratories) in an institution (or for some aggregation of rooms with different Station Counts or of different types.)* $AvSOR = \frac{(Scheduled\ Weekly\ Student\ Hours\ per\ Station)}{(Scheduled\ Weekly\ Room\ Hours\ per\ Room)}$

TITLE	DESCRIPTION
Average Station Utilization Rate (AvSUR)	*The average number of hours per week the total number of Stations in a group of rooms is scheduled. As a matter of convention, Average Station Utilization Rate (AvSUR) is used with respect to the total number of classrooms (or class laboratories) in an institution (or for some aggregation of rooms with different Station Counts or of different types).* $AvSUR = \frac{(Scheduled\ Weekly\ Student\ Hours)}{(Number\ of\ Stations)}$ *also* $AvSUR = (Average\ Room\ Utilization\ Rate) \times (Average\ Station\ Occupancy\ Ratio)$ $= (AvRUR) \times (AvSOR)$

2. *Continuous Cooperation in Facilities Reporting*
   Institutions and systems will continue to cooperate in state-coordinated efforts to provide facilities information which assures a high degree of compatibility in statewide and national reporting.

3. *Yearly Review and Updating of Facilities Files*
   A review and update of facilities files, including definitions and standard data elements, will be accomplished at least once each year.

4. *Common Coding and Editing Programs*
   Common coding formats and editing programs could be developed for facilities data elements, if such coding and editing programs are considered useful for institutional, system, and statewide procedures.

5. *1973-75 Biennial Budget Format and Plant Operation and Maintenance*

   A program-type budget for operation and maintenance of buildings and grounds will be prepared for inclusion in the 1973-75 Biennial Budget. This presentation will be in addition to the regular object-of-expenditure budget.

V. A PERIOD OF ADJUSTMENT IN THE APPROPRIATIONS PROCESS

The use of formulas in state budgeting for higher education may be defined as attempts to equitably *estimate future fiscal needs of institutions* based on certain assumptions about the relationship of enrollments, numbers of faculty, average salary, and other such measurable items to investment payoff in higher education that the public desires. Berdahl uses such a definition in his analysis of the state appropriations process for higher education and further identifies that formula approaches "are presently used to formulate *asking* budgets, not *spending* budgets."[18]

This general definition of formulas in the budget process is consistent with the Commission's recommendation in 1970 that a "6 Cell" formula (defined in *Meeting the Challenge)* be used as a base in the future for institutional requests for additional teaching positions. However, in studying the "6 cell" formula or any modification or alternative, we should first turn our attention to the underlying assumption that there are measurable relationships between those items used in the formula and the investment interests the public has in higher education. We do this because what an institution requests, how it requests it (by formula in this case) and how it is spent — are all related, and if the underlying assumptions in any part of this process are faulty, weak, or nonapplicable — the whole process is affected.

When reviewing the idea of relationships or assumptions of relationships between public investment interests in the "6 cell" faculty/staffing formula in interviews with institutional budget officers, legislative staff, and educational researchers, there was general agreement in all cases that there was little empirical evidence for a particular choice of faculty to student ratios. Instead, the indicated ratios develop over time through the appropriation-negotiation process. Institutional factors that combine in this process include:

1. Various types of educational delivery mechanisms used by individual teaching units;
2. Variability in mission among and between systems, institutions and departments;
3. Enrollment constraints and considerations; and
4. The market for teaching manpower.

Legislative factors that are involved in shaping these ratios include:

1. Funding climate at any given time;
2. Needs to simplify, if possible, the ever increasing complexity of budget evaluations; and
3. Needs for uniform methods and measures for comparing a variety of different programs.

Moreover, since the negotiation process naturally elicits discussions of how to evaluate the forthcoming marriage of institutional plans and public monies, both educators and legislators tend to use staffing ratios as proxies for evaluative "input" and "output" measures of education.

Brandl comments that this development grows out of economists' attempts to estimate the behavior of firms. He points out, however, that the economist evaluating the behavior of the firm has two advantages over the education evaluator:

"(1) Economics provides a theoretical rationale (growing out of a profit maximizing hypothesis) for arguing that the relationship which he finds will be effi-

[18]Robert O. Berdahl, *Statewide Coordination of Higher Education* (American Council on Education: Washington, D.C., 1971) p. 124.

cient—that it will indicate the lowest-cost way of achieving any particular level of output. Since we do not know what school administrators are maximinizing, the economists' approach *can only yield a description of current practice in education, not necessarily any insight into how to do things better* (emphasis added).

(2) The profit maximization hypothesis simplifies statistical or econometric analysis. Whatever school administration are maximinizing—or the American public(s) wants to do—it is more complicated than a single measure can show."[14]

The reasons behind Brandl's strictly analytical viewpoint is that we do not have large scale, scrupulously controlled, educational experiments which might clearly identify production like factors and relationships.

Forgetting, for the moment, the analysts' pessimism regarding educational "formulas," it is worthwhile to point out some of the practical benefits of the formula approach to budgeting. The first aspect, as mentioned earlier, is that formulas move in the direction of simplification of complex issues. Simplification can be good if it clarifies fundamental, invariant relationships without "throwing out the baby with the bath water." This point, if achievable, is beneficial to both sides of the bargaining table.

A second advantage often claimed by institutional representatives is that formulas can provide institutions fiscal flexibility and equitable funding treatment. Fiscal flexibility arises if the formulas are used to present *asking* budgets, not *spending* budgets. An institution granted dollars on the basis of formulas and other justifications and then left approximately free to spend where needed understandably identifies fiscal flexibility as a benefit of the formula approach. In times of scarce resources, however, asking budgets and spending budgets move closer together and the vexing problems related to measuring the educational assumptions connected with formulas emerge.

Equitable funding treatment of institutions is noted by Miller as the greatest success scored by formulas and cost analysis procedures in the appropriations process. He states that this success is especially true if no attempt is made through the formula to eliminate existing programs.[15] The notions of equity emerge, in part, from the concern that the real conflict legislators face is not the determination or judgement of over-all level of support to higher education but rather the distribution of funds among state institutions. Equity develops because formulas compel movement toward standard definitions of formula cost elements such as Full-Time Equivalent Student and the identification that different levels or kinds of instruction have different costs. The Commission's recommendations to the 1971 Legislature regarding improving the budgeting process and its recent adoption of guidelines for uniform costing methods are examples of this movement. Other states show similar developments.

On the cautionary side regarding the use of formulas, it is fair to state that the temptation to use formulas in place of judgment may be large. The formulas cannot make policy, and with understanding of their definition they are excluded from such roles. The formulas, when they are used, should be introduced *prior* to program policy decisions to provide a proxy for an economic perspective.

Since the formulas are basic to and contingent upon enrollment, predictions through ratios and unit costs to estimate future institutional budgetary requirements, they should have the features of adaptability. Adaptive aspects, if they can be designed into the budgetary process, should be directed toward mitigating such

[14]John E. Brandl "Education Program Analysis at HEW," *Public Expenditures and Policy Analysis* (Chicago: Markham Pub. Co., 1971) p. 555.

[15]James E. Miller, "State Budgeting for Higher Education," *The Use of Formulas and Cost Analysis* (Ann Arbor: Univ. of Mich., Institute of Public Administration, 1964) p. 152.

estimation problems. One method of adaptation is to make budgeting allocations based on projected enrollments, contingent upon actual enrollments. A complimentary method of adaptation is to periodically review the formula cost elements and ratios. This latter method encourages the keeping of current input data, invites comparative analysis, and draws attention to time influenced variables. However, such reviews have the tendency to re-open policy questions which otherwise might be looked upon as "settled." This may be considered as a decided advantage by those who challenge existing practice and are concerned with re-examining key issues and keeping up-to-date.

Another cautionary note is the question of new, innovative programs. These often are inefficient at their beginnings and have little chance of competing against established programs if funds are granted by formulas based on student load. Provisions must be made so that formulas do not obscure the continuing need for support of creative and innovative programs at all institutions.

Reviewing the 6-Cell Formula

In response to the legislative charge to further study the "6 cell" faculty/student staffing formula and recommend possible modifications and/or alternatives, the staff conducted a number of interviews with system representatives, legislative staff, and educational researchers to identify guidelines for study. The major themes that emerged from these discussions were the following:

1. There was little empirical evidence to support a particular choice of staffing ratios to be used for determining how colleges and universities should project funding needs.
2. When used in the budget process, staffing formulas should be simple, direct, and should reflect a continuity with past practices and staffing patterns.
3. Because of the continuing progress being made toward developing uniform methods for identifying instructional costs, a possible long-range alternative to a staffing formula budget approach is program budget process.
4. The "6-cell" formula gives a correct ordering by level of the relative costs of instruction. Namely, lower division has a lower cost than upper division; and upper division has a lower cost than graduate/professional offerings.

Another theme that emerged from these discussions was that the "6-cell" formula yields upper division and graduate/professional staffing patterns that are higher than existing experience. This picture is best described by looking at the responses to using the "6-cell" formula during the 1971 Legislative Session and comparing this with the anticipated system responses in the upcoming 1973 session.

In 1971, the Junior College System found no inconsistencies in using the formula for preparing their "asking" budget. The lower division model was a reasonable fit for their system.

The State College System did not use the whole formula during the last session. They used the lower division portion and presented other justifications for the upper division and graduate levels.

The University of Minnesota used the "6-cell" formula as prescribed and found that the resulting request was divergent from their existing staffing patterns by 16 percent (an increase of 628 teaching positions). This situation also was divergent from legislative expectations.

One alternative to this problem is simply to "thin out" the staffing formulas at the upper division and graduate/professional levels by some agreed upon amount. The risks involved with this approach are pointed out in the Carnegie Commission Report, *The More Effective Use of Resources,* when they recommend caution in ratios as "we know far too little about the impact of faculty-student ratios on the quality of instruction." This concern is particularly important in a time when the

Coordinating Commission has asked the University to emphasize graduate/professional training. Such an alternative runs a risk of magnifying divergent goals among our Commission's recommendations. As a last comment on the alternative, it must be remembered that the formula-budgeting process directly driven by student load emerged some fifteen years ago when resources were full and students were entering post-secondary education in ever increasing numbers from year to year. Thus, the formula approach was not developed or tested in the context of leveling or declining enrollments, such as many institutions are now experiencing.

The conflict thus posed by the formula-budgeting approach is the problem of trying to use simple methods of budget justifications in a time of scarce resources and leveling student loads. Such an environment demands more precise justifications for all operations and programs.

In response to this problem, all systems of higher education in Minnesota for the 1973 Legislative Session are moving towards a display of budget requests on a program or teaching unit basis.

Such a movement is, indeed, more complex than a formula system. It does, however, more precisely reflect the reality of fund expenditures within systems of institutions. This complexity implies that both the systems' officers in preparing requests and legislative or executive representatives in understanding the reasons for justification must "reach a bit further" in the mutual process of evaluating values of higher education.

Conclusion

In view of the preceding discussion, the Commission concludes that it would be inappropriate to continue using the 6-cell staffing formula in the review of systems' budgets in the appropriations process. Although the formula provided a mechanism for evaluating the requests of the institutions on a comparable basis, and although it was adaptive to changes in enrollment trends by level of instruction, it did not nor was it intended to provide the basis for a staffing entitlement. To continue using the formula during a period of leveling or declining enrollments would only add to the complexity that exists in the present budgetary process.

The Commission urges the systems to exert immediate efforts to reallocate staff and programs in a manner that is adaptive to the present and projected enrollment trends in order to return staffing patterns to their 1971 level. In so urging, however, the Commission recognizes that programs cannot always be terminated immediately without seriously affecting the quality of the overall institutional offering. Thus, the Commission also urges the Legislature to recognize this period as one of adjustment and to use the 1971 approved staffing patterns only as benchmarks, not as objective standards, recognizing that it will be necessary, in some cases, to have higher faculty-student ratios (produced by declining enrollments) than previously existed in order to maintain the quality and to accomplish the objective of existing programs in institutions that are experiencing declining enrollment.

Recommendation

The Commission recognizes, however, that the budgetary process would be vastly improved if the budgets submitted by the public systems of post-secondary education were all prepared and submitted on a comparable basis so that inter-system comparisons could be made. Such a process would make the requests of the systems more understandable, it would more clearly identify the relevant trade-offs that are the heart of the budgetary process, and as a consequence, it will lead to better informed decision making.

It is further recognized that post-secondary education is in a period of unstable enrollments with rather dramatic fluctuations occurring among the systems and with a probable leveling or possible downturn in enrollment occurring with the decade.

Thus, the continued application of student load driven formula budgeting processes, which were developed to handle rapidly increasing enrollments, will prove increasingly inadequate during this period. It is necessary then, to look to different procedures to provide a more effective budgetary process.

This has already begun in several different ways. The Department of Administration has initiated an "Activity Analysis" in an attempt to relate expenditures of state funds to specific activities carried on by state agencies including public post-secondary educational systems. The systems themselves have initiated efforts to introduce program-oriented accounting and budgeting procedures which will provide them with better management information for the administration and evaluation of their educational programs and products. The Junior College System has developed a program budgeting process that is more or less operational. The state colleges expect to have a program-oriented budgeting system operational by 1975. And the University is proceeding with the development of its own budgetary system that will relate expenditures to the specific programs offered by the University.

Desirable as these developments may be in an effort to move from formula budgeting, the fact remains, however, that each of the systems is proceeding with the development of its own budgeting system. Although they are defining data elements in ways that are based on national standards, they are establishing allocation procedures that are based on their own budgeting and accounting needs, and they are discretely identifying programs and their products in accordance with their institutional missions. The Commission does not mean to suggest that this is inappropriate. Indeed, the primary purpose of a budgeting and accounting process should be to serve the management needs of those responsible for the administration of the enterprise. But it is also true that these independent processes will lead to budgetary procedures for each of the systems that only inadvertently will result in comparable and compatible budgetary information for the Legislature.

Accordingly, the Commission recommends that the budgeting systems being developed in each of the systems be investigated to identify areas of incompatibility and to develop a plan for the implementation of an inter-system budgetary process that would serve the needs of individual systems while, at the same time, provide comparable budgetary information to the Legislature in order to improve the decision-making process in the appropriations process.

PART TWO: ASSESSING NEEDS AND PROVIDING NEW OPPORTUNITIES

VI. MEETING NEEDS IN PLANNING REGIONS NINE AND TEN

In referring the question of a branch of the University of Minnesota in Rochester to the Commission, the 1971 Legislature also requested an assessment of the possible need for additional public institutions in the southeastern area of Minnesota designated as Planning Regions Nine and Ten. The 1971 Legislature also directed the Commission "to describe the nature of any proposed institution for which the Commission identifies a need and of feasible types of institutions" and "to assess the implications of establishing any proposed new institution for existing post-secondary institutions in the area and the anticipated impact of such new institution on existing institutions."

In order to fulfill this complex charge, the Commission (1) invited, received, and reviewed testimony and information from interested citizens and groups, (2) conducted extensive research on present and projected post-secondary needs and activities in Planning Regions Nine and Ten, (3) established and sought advice from a panel of out-of-state consultants consisting of nationally recognized scholars and administrators in post-secondary education, and (4) invited views and suggestions from the Higher Education Advisory Council. The Commission also reviewed previous studies and statements concerning a University branch in Rochester.

Testimony and information presented to the Commission by interested parties was focused almost exclusively on the specific issue of a University branch in Rochester. For the most part, presentations from citizens of Rochester and officials of the University of Minnesota indicated strong desire and important advantages for establishing a University campus in Rochester. On the other hand, presentations from representatives of some other communities and institutions in the area reflected concern that a University campus in Rochester would be an unnecessary duplication of post-secondary programs in the state and the area and might have a negative effect on existing institutions in or near Rochester.

Members of the panel of consultants established to assist with the Region Nine and Ten Study were selected in consultation with the Higher Education Advisory Council for their expertise and experience in planning post-secondary education. Selected were: Dr. Richard Bond, President, University of Northern Colorado, Chairman; Dr. Selma Mushkin, Director, Public Services Laboratory, Georgetown University; Dr. Raymond Young, Senior Staff Consultant, Arthur D. Litttle, Inc.; and Dr. James Wattenbarger, Director, Institute of Higher Education, University of Florida.

The consultants were given the charge of (1) guiding and reviewing research conducted by the Commission staff and (2) advising the Commission on needs and possible means for meeting unmet needs. A preliminary report was presented by the consultants at the Commission meeting of August 24, 1972 and a final report was submitted on September 22, 1972.

The consultants found existing insitutions to be more than adequate in number to meet post-secondary needs in Regions Nine and Ten for the foreseeable future. However, they contended that some relocation and restructuring of institutions in the Rochester-Winona area would provide for meeting area needs more effectively. Conclusions of the consultants were stated as follows:

1. Access to educational programs of up to two years duration beyond the high school in Regions Nine and Ten appears to be adequate both currently

and for the next decade. There may be, within existing institutions, some need for expanded facilities, but we find no need for additional or duplicating institutions at this level.

2. The existence of public junior colleges and area vocational-technical institute offering post-secondary level programs in close proximity most often represents an unnecessary duplication of effort. This arrangement also creates artificial distinctions detrimental to the educational process and inhibits the free lateral movement and options of students among the variety of programs.
3. Access to upper division and graduate levels of education is inadequate in the Rochester area.
4. Empty spaces exist at the upper division and graduate levels in state colleges serving Regions Nine and Ten. Duplication of opportunities at these levels is detrimental to existing institutions as well as an unwise expenditure of funds.
5. The 89 full-time equivalent graduate students (273 headcount) enrolled at Winona State College in the fall of 1971 do not constitute the critical mass needed for graduate education.
6. In the fall of 1971, there were approximately 1400 FTE students at the upper division level at Winona State College.
7. Winona State College is mainly a local rather than a regional institution. Among its 1970 undergraduates, approximately 29 percent of its students come from Winona and Fillmore counties; about the same number come from all the rest of Region Ten. Winona and Fillmore counties comprise approximately 17 percent of the total population of Region Ten.
8. The blunt fact in 1972 is that Winona State College is in the wrong place to serve adequately as a regional institution.
9. The complex problems of higher education in Regions Nine and Ten which have heretofore defied solution will continue to do so and will continue to be the subject for additional studies unless decisive and bold action is taken.

Five alternative proposed developments were reviewed and rejected in the consultants' preliminary report. These rejected alternatives are: (1) preservation of the status quo, (2) establishment of a new institution, either four-year or upper division and graduate, in Rochester, (3) establishment of a University of Minnesota branch in Rochester, (4) vertical expansion of Rochester State Junior College, and (5) establishment of a cooperative upper division center.

The preliminary consultants' report contained five recommendations, which are as follows (summarized):

1. That the Rochester Junior College and the Rochester Area Vocational-Technical Institute be combined under the governance of the Minnesota State Junior College System.
2. That the upper division/graduate portion of Winona State College be translocated to Rochester as a separate nonresidential institution, to be located as nearly contiguous to Rochester Junior College as possible.
3. That the lower division of Winona State College be merged with the Winona Area Vocational-Technical Institute to become a community-junior college under the Minnesota State Junior College System.
4. That the new Winona Junior College accept a special responsibility in the state.
5. That advanced graduate programs in the Rochester area beyond the master's degree, including those in medicine, be continued either as an extension

service of the University of Minnesota, or as a part of a cooperative higher education center with major emphasis upon connection with and direction from the degree-granting departments.

Strong negative reactions to the consultant recommendations were expressed by representatives of the University of Minnesota, the State College System, the State Department of Education, and Rochester. In view of these reactions, the Commission requested the consultants to recommend an alternative plan for improving the post-secondary education arrangement in the Rochester-Winona area. The consultants agreed to make such a recommendation and invited any additional information which interested parties thought should be considered.

In their final report, the consultants reaffirmed their preliminary report as representing "the best educational judgment of the panelists after examination of all data and after consideration of public reaction to the recommendations." They also proposed some "interim steps to solve in the near term the problems in the Rochester area" as an alternative to be considered in the event their recommendations were not viewed as feasible. These steps involve (1) establishing a consortium to offer upper division and graduate level work in the Rochester area, (2) combining the state junior college and the area vocational-technical institute in Rochester, and (3) giving consideration to converting the Winona Area Vocational-Technical Institute into a community college. The consultants proposed that such an interim solution involving no larger new institutional commitment be reviewed in a few years when future enrollment demands and demands for professional and technical personnel become more certain.

Members of the Higher Education Advisory Council have offered useful suggestions on the issue under consideration. However, as of November 10, members of the Council had not agreed on a recommendation to the Commission.

After careful review of research on post-secondary education needs and existing institutional capacities in Regions Nine and Ten and full consideration of the advice and proposals provided by citizens of the area, representatives of post-secondary institutions and systems, and the panel of consultants, the Commission has reached the following conclusions:

1. Existing institutions are sufficient in both number and variety to provide the capacity necessary for meeting post-secondary education needs in Regions Nine and Ten.
2. In view of the above, any decision to establish a new institution would have to be based on meeting special local needs.
3. Access to upper division and graduate level opportunities in Rochester is less than fully desirable.
4. The Rochester community offers an unusually fine setting for an institution of post-secondary education.
5. Establishing a senior institution of post-secondary education in Rochester would affect Winona State College adversely and would result in inefficient use of resources.
6. While moving the upper division and graduate level programs of Winona State College to Rochester would provide better placement of educational opportunities for meeting needs of the region, such a plan is not politically feasible.
7. Present statewide post-secondary education needs do not justify establishing an additional post-secondary institution.
8. Access to upper division and graduate level post-secondary opportunities in Rochester could be improved through a carefully planned program which draws on the capacities of existing institutions.

9. Declining enrollments and limited tax dollars for post-secondary education suggest that meeting special local needs in the future must be accomplished through interinstitutional and inter-system cooperative efforts rather than through developing new institutions which will compete with existing institutions for both students and funds.

The complexity of the situation is reflected by these conclusions. On the one hand, Rochester provides a fine setting for a senior collegiate institution and making upper division and graduate level opportunities more accessible to residents of Rochester and the immediately surrounding area would be advantageous. On the other hand, existing institutions can provide sufficient capacity to meet needs of Regions Nine and Ten, and present statewide trends simply do not justify recommending establishment of an additional senior institution. While transferring the upper division and graduate level programs of Winona State College to Rochester would provide better placement for meeting needs of the region, the dislocations and turmoil involved in such a move would appear to make such a plan unrealistic. In effect, the problem of meeting all of the post-secondary needs in Rochester is sufficiently complex to defy any solution which satisfies all of the conflicting needs, conditions and interests.

In the judgment of the Commission, much of the need for improving access to upper division and graduate level post-secondary education in Rochester can be met through establishment of a consortium which offers cooperative interinstitutional programs drawing heavily on the resources of existing institutions. The Commission recognizes that such an arrangement may not fully satisfy the desires of Rochester residents who wish to have a University branch in Rochester. Similarly, the plan may not fully satisfy representatives of the University of Minnesota. However, a consortium arrangement offers significant potential for addressing unmet needs and represents a clear improvement over the status quo.

The kind of consortium envisioned by the Commission would not involve the large investment of capital funds required for building a campus for a new institution. It would not pose the pervasive threat to Winona State College which is inherent in alternative plans. In addition, the level of activity and of the investment in such a consortium could be increased and reduced as changing needs and experience may indicate with relative ease. The entire arrangment could be terminated, wherever appropriate, without creating the serious dislocations associated with the nearly impossible task of closing an institution. Moreover, such an arrangement provides the opportunity for testing an innovative interinstitutional cooperative approach to meeting needs which may serve as a model for other interinstitutional and inter-system efforts. Cooperating in a consortium arrangement of the magnitude envisioned for Rochester may provide significant positive experience for Minnesota post-secondary institutions and systems.

Based on these conclusions, the Commission recommends that the 1973 Legislature pass legislation establishing a Rochester Higher Education Consortium with the following characteristics and conditions:

1. *The consortium shall be governed by a board consisting of the Higher Education Advisory Council plus the executive director of the Higher Education Coordinating Commission, who shall serve as chairman.*
2. *The consortium shall be administered by a coordinating provost to be appointed by the board and to serve at the pleasure of the board.*
3. *The coordinating provost shall serve as chief executive officer of the board in addition to assuming primary responsibility for administration of consortium affairs under the policies prescribed by the board.*
4. *The board shall have the authority to appoint such other officers and employees as may be necessary for accomplishing the purposes of the consortium within the constraints of available funds; officers and em-*

ployees of the consortium may also be employees of a cooperating institution or system at the discretion of the board and the cooperating institution or system.

5. *The coordinating provost and the board shall be advised by a curriculum planning committee consisting of one representative each from Rochester State Junior College, Rochester Area Vocational-Technical Institute, the University of Minnesota Rochester Extension Center, the Twin Cities Campus of the University of Minnesota, Mayo Clinic, Winona State College, Mankato State College and two representatives of private colleges in Regions Nine and Ten appointed by the Private College Council.*
6. *The coordinating provost and the board also shall be advised by a citizens' advisory committee consisting of five persons appointed by the Governor of Minnesota from Regions Nine and Ten.*
7. *The purpose of the Rochester Higher Education Consortium shall be to offer or arrange to have offered courses and programs at the upper division and graduate level which can be developed through cooperation of existing institutions and which will meet specific needs in Rochester and the immediately surrounding areas; emphasis should be placed on structuring offerings in such a manner as to minimize any adverse effects on Winona State College.*

The Commission further recommends that the consortium board and provost be requested to develop a specific plan for fulfilling the purposes of the consortium with modest legislative appropriations, such plan to be submitted to the Higher Education Coordinating Commission by July 1, 1974, and such plan to serve as a basis for recommendations by the Commission to the 1973 Legislature on continuing development of the consortium. The plan shall include but not be limited to resolution of such issues and problems as:

1. *Should the consortium offer degrees or should degrees be awarded by cooperating institutions?*
2. *Should the consortium collect tuition for courses offered or should tuition be paid to a cooperating institution?*
3. *Should the consortium pay salaries of instructors and other expenses incurred with offering courses or should such salaries and expenses be paid either singly or jointly by cooperating institutions?*
4. *Should the Rochester Extension Center be continued as a separate entity or subsumed and replaced by the consortium?*
5. *What specific courses and programs should be offered by the consortium over the next five years?*
6. *What is the projected amount of direct costs which should be covered by legislative appropriation to the consortium and the amount which should be assumed by cooperating institutions or secured from other sources during the next five years?*

The Commission further recommends that, in addition to developing the plans for future development of the consortium, the board and coordinating provost be charged with stimulating, coordinating, and implementing programs consistent with the purpose and conditions specified above as fully as feasible with the cooperation of participating institutions during the next biennium.

The Commission further recommends that the 1973 Legislature appropriate $50,000 for the first year of the biennium and $80,000 for the second year of the biennium to the consortium and that such appropriation be in addition to appropriations for the Rochester Extension Center and for institutions of post-secondary education in the area.

VII. THE NEED FOR ADDITIONAL AREA VOCATIONAL-TECHNICAL INSTITUTES

The request by the 1971 Legislature that the Higher Education Coordinating Commission study the need for additional public area vocational-technical institutes stimulated a review of the policy on establishing and supporting institutions of post-secondary education as recommended by the Commission to the 1969 Legislature. The policy-recommendation was stated as follows:

A. A publicly-supported institution of post-secondary education should be located within 35 miles of every Minnesota community with a population of 5,000 or more.

B. A public institution which offers at least the first two years of collegiate studies leading to the baccalaureate degree should be located within 20 miles of every Minnesota community with a population of 10,000 or more.

C. When the peculiar characteristics of an area clearly indicate the desirability of establishing and supporting institutions in addition to those established and maintained through implementation of guidelines A and B, the determination to establish additional institutions should be based upon the special intensity and extent of need in the area and should be considered in the context of the total needs of the state for post-secondary education.

Two conclusions emanate from the review of the policy:

1. The policy is sound and does not require modification to take into account any changes which have occurred since 1969, and
2. The state has made remarkable progress in meeting the policy guidelines.

Examination of Figure 1 which shows the location and 35 miles commuting region of each of the area vocational-technical institutes reveals that more than 90 percent of all Minnesota residents reside within 35 miles of an area vocational-technical institute and at least 60 percent of all Minnesota residents are within 35 miles of two or more area vocational-technical institutes. Figure 2 reveals the fact that a substantial portion of that population not served by an area vocational-technical institute has access to a public junior college or four-year institution within 35 miles. Only two communities with population exceeding 5,000 (East Grand Forks and International Falls) were not served by an area vocational-technical institute within 35 miles when the Commission initiated the study as requested by the 1971 Legislature.

On December 2, 1971, the Higher Education Coordinating Commission took favorable action on the proposal for establishing an area vocational-technical school in East Grand Forks. The Commission's decision on the proposal was reached after careful consideration of the report on the proposal by the Department of Education, additional information provided by the Commission staff, a presentation to the Commission by representatives of the East Grand Forks community, and testimony at a public hearing on the proposal. The decision was based on the conclusion that the present and future needs of the residents of East Grand Forks and the surrounding area is sufficient to justify the investment necessary for an area vocational-technical school and that establishing such a school is a viable means for meeting needs in the area.

The Commission's basic policy on establishing new institutions reflects the goal of extending the benefits of post-secondary education to as many Minnesota residents as feasible. In providing that a public post-secondary institution should be available within 35 miles of every Minnesota community with a population of 5,000 or more and within 20 miles of every community with a population of 10,000, the policy also recognizes the demonstrated relationship between accessibility of post-secondary opportunities and the propensity of residents to pursue education beyond the high school.

FIGURE 1

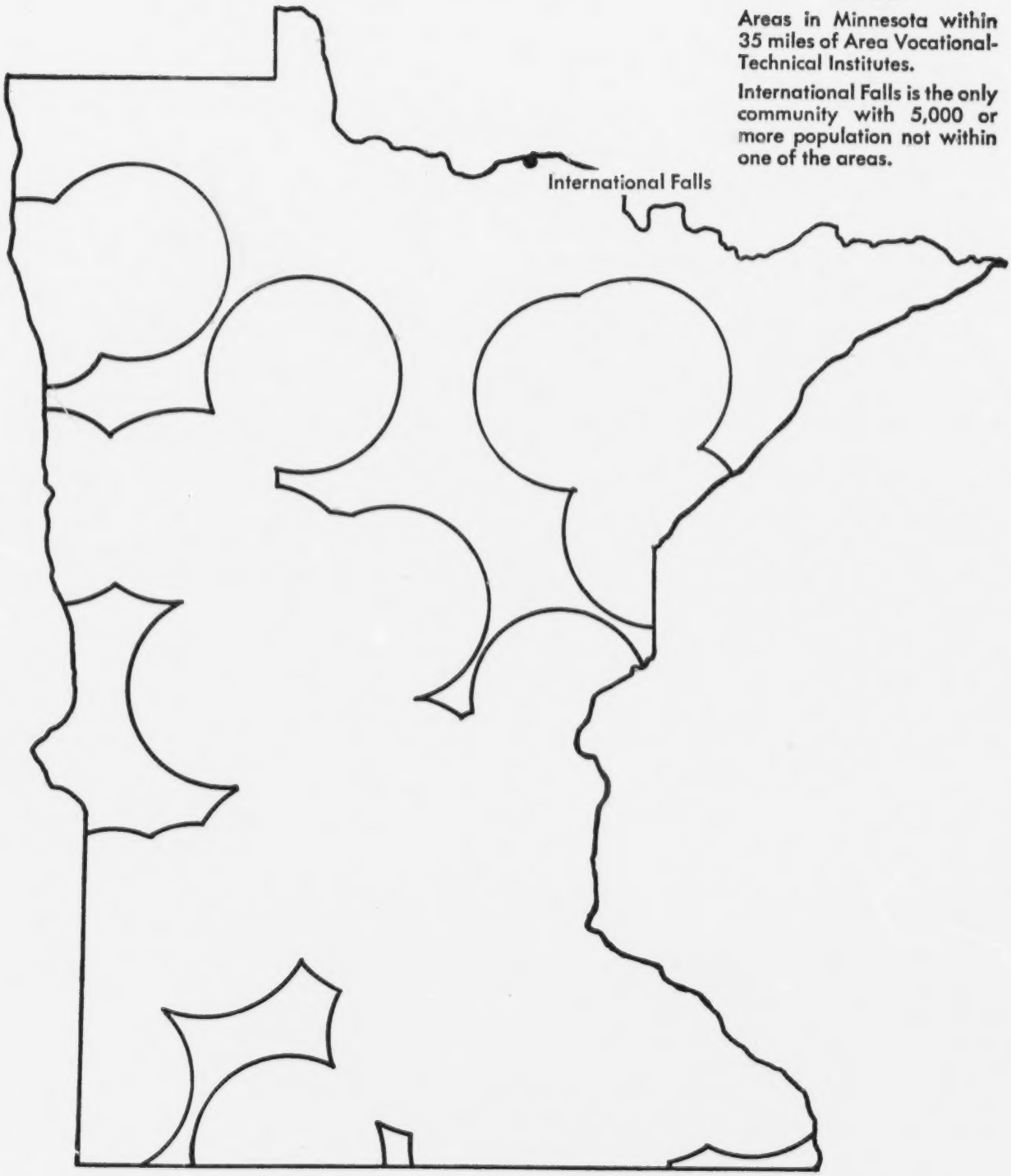
LEGEND
Areas in Minnesota within 35 miles of Area Vocational-Technical Institutes.
International Falls is the only community with 5,000 or more population not within one of the areas.
International Falls

FIGURE 2

LEGEND
Areas in Minnesota within 35 miles of post-secondary education institutions.
No community with 5,000 or more population is excluded.

Careful review of the situation revealed that the spirit and intent of the policy on new institutions had not previously been fulfilled in the East Grand Forks area. While the University of Minnesota Technical College at Crookston is within 35 miles of East Grand Forks, the technical college is a special purpose institution with instructional offerings limited to programs in agriculture and closely related areas. The technical college provides a specialized statewide service and is not maintained for the purpose of meeting the comprehensive needs for post-secondary vocational education in the immediate vicinity of the college. The absence of a more comprehensive institution within commuting distance of East Grand Forks with a population exceeding 7,500 and the surrounding area leaves a void in the state's effort to make post-secondary education as accessible as feasible to all residents. This void can be filled effectively by a public area vocational-technical institute.

The East Grand Forks-Grand Forks population center provides a favorable setting for an area vocational-technical institute. The industry and business service activities of the area clearly are sufficiently extensive and varied to provide significant resources for vocational education. Residents of the area have demonstrated a strong desire to provide the leadership and support necessary for a successful post-secondary vocational effort.

In view of the present and future needs of the residents of the East Grand Forks area for post-secondary education, the absence of any Minnesota public post-secondary education institution offering a comprehensive program within reasonable commuting distance, and the favorable setting for vocational education, establishing an area vocational-technical institute in East Grand Forks was determined to be both feasible and desirable.

With the establishment of an area vocational-technical institute in East Grand Forks, International Falls remains the sole Minnesota community with population in excess of 5,000 which is not served by an area vocational-technical institute within 35 miles. However, International Falls and the surrounding area is served by a state junior college located in International Falls. Since the state junior college can and does offer terminal vocational programs as well as programs designed for transfer to a senior institution, and since the population in the area is not sufficiently larger to justify two public institutions in the area, establishing an area vocational-technical institute in the International Falls area would not represent judicious investment of public funds.

Establishing a state junior college in New Ulm as recommended by the Commission in the Commission report to the 1969 Legislature would make post-secondary education opportunities available within the 35-mile commuting distance to a portion of the Minnesota population not presently served as fully as desirable. While establishing additional area vocational-technical institutes or other post-secondary institutions to serve the remaining Minnesota residents who do not have an institution within 35 miles of their place of residence might be desirable, these remaining residents are dispersed geographically in such a way that providing post-secondary institutions within 35 miles of their places of residence is not feasible.

Previous concern for providing the number of post-secondary institutions appropriate for meeting needs in more densely populated areas of the state has been largely alleviated by the establishment of additional area vocational-technical institutes in the seven-county metropolitan area during the past few years. The number of area vocational-technical institutes in this metropolitan area now has grown to six. With six state junior colleges, the Twin Cities campus of the University of Minnesota, Metropolitan State College and 18 private collegiate institutions and 37 private vocational institutions, the seven-county metropolitan area is reasonably well served and no demonstrated need for additional area vocational-technical institutes remains. The Commission continues to believe that establishing a state junior college in St. Paul, as recommended in the Commission report to the

1969 Legislature, is both feasible and desirable. Establishing a state junior college in St. Paul would fill a void in the distribution of comprehensive lower division opportunities and would meet demonstrated needs of inner-city residents of St. Paul. The population of St. Paul is more than adequate to justify both the existing area vocational-technical institute and a state junior college in St. Paul.

Establishing additional public post-secondary institutions in order to increase the range of opportunities in some additional areas of the state is both desirable and feasible, but the need is not pressing and such developments probably cannot command high priority among total post-secondary needs of the state at this time. The primary instances of this situation are reflected in the recommendations for establishing state junior colleges in Owatonna and Alexandria, as presented in the Commission report to the 1969 Legislature.

Meeting post-secondary education needs in the Rochester area is a complex problem. Since the 1971 Legislature requested a special study of this situation within the context of needs of Planning Regions Nine and Ten, the Commission's assessments and recommendations concerning Rochester are presented separately.

In summary, the Commission has not identified any demonstrated need which is great enough to justify establishing any additional area vocational-technical institute. The Commissioner of Education, who serves as the chief executive officer of the State Board for Vocational Education, agrees with this assessment of the situation.

The Commission recommends that no new area vocational-technical institutes be authorized until such time as greater need and feasibility becomes evident. In addition, the increasing excess capacity at other public institutions in the state indicates that caution should be exercised in expanding existing area vocational-technical institutes. Accordingly, the Commission recommends that the State Board for Vocational Education not approve any additional construction at existing area vocational-technical institutes without prior review of the proposed construction by the Higher Education Coordinating Commission.

VIII. EXPANDING OPPORTUNITIES THROUGH INTER-STATE RECIPROCITY

In planning for meeting the post-secondary education needs of Minnesota residents, it was recognized several years ago that part of the increasing needs for availability and accessibility could be met through reciprocal agreements with neighboring states rather than always establishing new institutions and developing new institutional programs.

Historically Minnesota and its neighbors developed their respective state systems of post-secondary education unilaterally and one result was that many institutions were located near their borders. In some areas, such as Duluth-Superior and Fargo-Moorhead, institutions were situated merely a few miles apart. Consistent with the traditional interpretations of state autonomy, each state viewed its respective public institutions as serving its own residents. In many instances the states established barriers which mitigated against service to residents of the neighboring states. Frequently, the states levied substantially higher tuition charges for residents of neighboring states than for resident students, and applicants from out-of-state were often required to meet higher admission standards.

Under the prevailing conditions, many residents of both Minnesota and its neighboring states found that post-secondary opportunities which were accessible geographically were actually relatively inaccessible because of the barriers of invisible state lines. Since opportunities provided by neighboring states were not readily accessible, each state was faced with the problem of providing the complete range of opportunities needed by its residents, even though the inefficiencies of duplication of institutions and programs along state borders was the result. Joint planning which could lead to greater economy and effectiveness in meeting the needs of residents of neighboring states was precluded.

An important step toward improving the situation was taken by the Minnesota Legislature when it authorized the Higher Education Coordinating Commission to enter into reciprocity agreements with neighboring states. Since 1967 discussions have been initiated with appropriate agencies in Wisconsin, North Dakota, South Dakota and Iowa. An agreement has been in effect with Wisconsin since the 1969-70 academic year, and discussions continue with the other states with the hope of reaching some accord which will be mutually beneficial.

As a result of the agreement with Wisconsin, 300 students from each state were able to attend institutions across the border on a resident basis for both tuition and admissions standards during the 1969-70 and 1970-71 academic years.

The purposes of the agreement are to continue to improve the post-secondary education advantages of residents of Minnesota and Wisconsin through greater availability and accessibility of post-secondary opportunities and to achieve improved effectiveness and economy in meeting the post-secondary needs of the residents of both states through cooperative planning by the appropriate agencies in each state.

Developing and administering a viable inter-state higher education reciprocity agreement has been a challenging endeavor. Much of the difficulty has revolved around the fact that the number of Minnesota residents seeking to attend Wisconsin institutions is more than three times greater than the number of Wisconsin residents seeking to attend Minnesota institutions. In an attempt to minimize the difficulties and better meet the objectives of the program, the agreement was expanded for the 1972-73 academic year[1]. The revised agreement made it possible for all residents of either state to be eligible to attend an institution of pose-secondary education, including for the first time vocational institutes, as resident undergraduates in the neighboring state. As a result of the expansion and a growing awareness of the

[1]The full text of the revised agreement is printed in Appendix J.

program, more than 600 students from each state are participating under the program in the 1972-73 academic year, and it is anticipated that the number will continue to increase annually.

Representatives from both Wisconsin and Minnesota are continuing in their efforts to improve the elements of the present agreement and to explore areas in which further expansion of the program may occur. The guidelines for the administration of the agreement have been modified annually to provide more widespread geographical access to the reciprocity program for Minnesota residents, while at the same time assuring that priority be given to those students from border communities who plan to commute to Wisconsin institutions. In addition, representatives from both states are continuing to investigate the possibilities of extending the agreement to include graduate students.

Although there was optimism in 1971 that the North Dakota Legislature would approve a proposed agreement with Minnesota, final approval has not been achieved.

The Commission proposes to continue discussion with North Dakota toward this end and recommends a continuation of the policy of seeking to improve the availability and accessibility of post-secondary education opportunities, including vocational-technical programs, to Minnesota residents through reciprocity agreements with neighboring states.

In addition to appropriate action at the state policy level, individual institutions working in concert with institutions in neighboring states can develop and implement plans for cooperative efforts to strengthen the individual institutions involved while elminating unwarranted duplication. The foundation for such cooperation and considerable progress toward achieving cooperative goals has been demonstrated by Moorhead State College, North Dakota State University and Concordia College. These three institutions — one a Minnesota state institution, one a North Dakota state institution and one a private institution — have identified a variety of ways in which they can cooperate in providing better service to the Fargo-Moorhead area with greater economy of effort while strengthening the individual institutions.

IX. MEETING POST-SECONDARY EDUCATION NEEDS OF DISADVANTAGED STUDENTS

In the 1971 report to the Legislature, *Meeting the Challenge,* the Commission outlined several proposals for extending the benefits of post-secondary education to Minnesota's disadvantaged population. The recommendations were based on a 1969 study[2] that identified four major barriers to post-secondary education for the economically disadvantaged:

1. The need of many disadvantaged persons for compensatory education to improve basic skills;
2. The importance of counseling services to guide the student into the appropriate post-secondary experience and to retrain the student once enrolled;
3. The need for adequate financial support to provide a post-secondary educational opportunity for the disadvantaged student;
4. The need for appropriate, geographically accessible post-secondary educational programs.

As pointed out in *Meeting the Challenge,* society in general and post-secondary education in particular lacks "continuity and breadth of experience in dealing with the disadvantaged population. Moreover, the prevailing structures and processes of post-secondary education have been developed primarily with reference to the needs and characteristics of the advantaged majority and not the disadvantaged minority." The problem then is to make post-secondary education both more accessible to disadvantaged students and more responsive to their needs.

The 1971 Legislature took important steps in addressing the needs of disadvantaged students by approving the Private College Contract Program and by increasing the appropriation for state scholarship and grant funds. During 1971-72, private colleges participating in the Private College Contract Program enrolled 228 students who received a State Grant and during 1972-73, it is estimated that they will enroll 512 more or a total of 740. (See Appendix H.) Thus, this program has resulted in a significant increase in the efforts of the private sector to deal with the disadvantaged student. Similarly, the increase in the appropriation for the State Grant-in-Aid program provided for assistance to 2,784 new students during the 1971-73 biennium.

In spite of our progress, the Commission believes that more can and should be done. Continued efforts must be made to strengthen elementary and secondary education to deal more effectively with disadvantaged youth and to provide the necessary counseling to guide them into appropriate forms of post-secondary education. As emphasized in many reports, the problems of the disadvantaged are not problems that can be solved entirely by post-secondary education. Efforts to deal with the problems of the disadvantaged population must extend throughout the entire educational system.

The Commission therefore reaffirms its previous recommendation that the capacity of elemementary and secondary schools to educate disadvantaged students be strengthened substantially in order that the educational deficiencies of disadvantaged students may be overcome earlier.

Making post-secondary education genuinely accessible to Minnesota's disadvantaged residents will require significant increases in resources available to help them pay for the cost. The Commission's statement on tuition policy, which appears

[2]Rafael A. Lewy et al, *Meeting the Post-Secondary Educational and Facility Needs of the Urban Disadvantaged in the Twin Cities: Alternative Proposals* (St. Paul, Minnesota: Minnesota Higher Education Coordinating Commission, 1969).

in a previous section of this report, emphasized the fact that tuition is but one of the costs of post-secondary education and at public institutions tuition tends to be a relatively small portion of the total expenses associated with education beyond the high school. Accordingly, resources are necessary to provide assistance to disadvantaged youth to enable them to pay for the other costs of post-secondary education — room, food, clothing, books and supplies, etc. — in order to improve access among these potential students. As the state moves closer to its goal of equal financial access, it is clear that those that continue to be excluded are the students from the lowest income families — the disadvantaged youth. To improve this situation will require significantly increased student aid funds.

Recognizing the need to make post-secondary education accessible to all Minnesota residents, including the disadvantaged, the Commission recommends that the 1973 Legislature appropriate $22,650,000 for the State Scholarship and Grant Program, thereby increasing this program by over 200 percent. It is further recommended that all funds for new awards be allocated to the Grant Program in order to provide greater access to post-secondary education for the economically disadvantaged.

It is important to realize, however, that a large proportion of students from disadvantaged backgrounds either lack the motivation or do not perceive the opportunities to develop their abilities through post-secondary education. Because they do not recognize post-secondary education as part of their world, they frequently do not seek it as a means to improve their situation. Thus, post-secondary education must seek them.

The Commission emphasizes that unless the resources are available in the form of student aid to help disadvantaged students defray the cost of obtaining a post-secondary education, efforts to seek them out will result in frustration and disappointment. Assuming, however, that adequate student aid is available, as recommended by the Commission, it is necessary to provide further services in order to attract disadvantaged youth to post-secondary education.

The Commission therefore restates its previous recommendation that in order to facilitate more effective efforts of all post-secondary education institutions in serving the largest concentrations of Minnesota's disadvantaged population and to provide a better link between this population and post-secondary education, the 1973 Legislature should appropriate $750,000 to establish an experimental cooperative education center in the Twin Cities.

The primary purpose of the center, as specified in *Meeting the Challenge*, should be to provide a necessary link between the disadvantaged population and post-secondary education by providing (1) assessment, counseling, and recruitment services, and (2) a limited program of compensatory and basic education. Secondary purposes include assisting and coordinating the individual efforts of post-secondary institutions and advising institutions on needs of disadvantaged youth and an effective approach for meeting these needs. The center should be viewed as a cooperative effort of all post-secondary institutions, and the center director should report to an operating board comprised of two members each from the University of Minnesota, the state colleges, and state junior colleges, the area vocational-technical schools, and the private colleges, all appointed by the Commission, and one member of the Commission's staff. The board should have full responsibility for operation of the experimental center with review and evaluation by the Commission. A working advisory committee comprised primarily of members of the disadvantaged population, but perhaps including others who work with that population, should be an integral part of the center's administrative structure. The center should be located near a major concentration of the disadvantaged population in the Twin Cities.

The Commission realizes further, however, that retention of disadvantaged youth in post-secondary education remains a serious problem. They are faced with new challenges and often confronted by different values. In many cases they are deficient in the basic skills required to compete successfully in the classroom. Because the problems of disadvantaged students are more extensive as the number of disadvantaged students entering an institution increases, the need for counseling services increases disproportionately. But unless these services are provided and unless institutions have the capacity to assume greater responsibility for the success of students than previously possible, post-secondary education will simply become another frustrating experience for the disadvantaged student, and retention will be low.

Accordingly, the Commission reaffirms its previous recommendation that the 1973 Legislature provide the funds necessary for Minnesota's public institutions of post-secondary education to meet the needs of individual students, both advantaged and disadvantaged, through effective counseling services.

X. FACILITATING THE MEETING OF POST-SECONDARY EDUCATIONAL NEEDS BY PRIVATE INSTITUTIONS

Origins of state policy aimed at more effective use of private institutions in meeting Minnesota's post-secondary education needs emanated from the request by the 1969 Legislature for the Higher Education Coordinating Commission to conduct "a staff study of the current and emerging needs and alternative solutions for post-secondary education in Minnesota, in cooperation with post-high school institutions and private colleges and universities, which shall be reported to the Legislature and the Governor on or before November 15, 1970."

Clearly, the concern of the 1969 Legislature for identifying acceptable alternative means for providing the services of post-secondary education was justified. Expanding needs of the state and its residents for the services and benefits of post-secondary education together with rapidly rising costs provided urgent reasons for assessing new ways for the state to fulfill its responsibility for post-secondary education.

Traditionally, the establishment and financing of public institutions of post-secondary education had been the only means utilized by the state in providing post-secondary educational opportunities for its residents in developing an educated citizenry. Alternatives for providing post-secondary education had been limited to such considerations as the number of public institutions which should be established or financed by the state, where such institutions should be located, what type of institutions they should be, and how much the state should invest in the support of these institutions. Little serious consideration was given to other possible means of fulfilling the state's responsibility for post-secondary education.

Passage of legislation authorizing a State Scholarship program by the 1967 Legislature recognized the facts that (1) simply providing public institutions of post-secondary education is not sufficient for fulfilling the state's responsibility to make post-secondary education realistically available to all Minnesota residents who can and should benefit from education beyond the high school, and (2) the state's interest in post-secondary education must be more pervasive than an interest in maintaining public institutions. In providing that a state scholarship recipient may attend either a public or a private higher education institution in Minnesota, the 1967 Legislature also recognized the fact that the state can appropriately provide post-secondary education opportunities for its residents in other ways. Action of the 1969 Legislature appropriating funds for state grants-in-aid, as well as increasing the appropriation for scholarships for students attending both public and private colleges and universities, represented increased effort reflecting recognition of these facts.

While post-secondary education has always been the responsibility of the state, privately controlled colleges had shared this responsibility voluntarily and without direct financial assistance from tax funds since the day Minnesota became a state. In the years immediately prior to 1971, the proportion of post-secondary needs being met by the state through public institutions had grown rapidly, while the proportion of needs being met voluntarily by private colleges had been declining rapidly. In 1971, students attending private colleges comprised less than 20 percent of total post-secondary enrollments in Minnesota, and the private college percentage of total enrollment was projected to decline in the future.

The 1971 Legislature took positive action on three Commission recommendations to alter these trends and to facilitate greater utilization of private colleges in addressing the needs for post-secondary education in Minnesota. To improve the

opportunity for residents to attend the institution of their choice, the Legislature approved an increase in scholarships and grants-in-aid. To facilitate desirable improvements in private college physical plants, the Legislature authorized the establishment of the Higher Education Facilities Authority. In addition, the 1971 Legislature authorized the Commission to contract with approved private colleges and universities for services rendered to the state through the education, in approved programs, of additional residents of the state.

The private college contract program was initiated in the fall of 1971 with 21 private colleges of the state participating. The contractual arrangement with participating institutions provides for payment to each institution an amount not to exceed $500 per student in each institution which grants a bachelor's degree and $400 per student in each institution which grants an associate's degree, for each Minnesota resident enrolled as a full-time student in excess of the number in the fall of 1970. In addition, participating two-year and four-year institutions receive $400 and $500 respectively for each state grant-in-aid recipient who is accommodated by a private college.

In the first two years of the program, the private colleges have responded positively to the new state policies and some have made significant efforts to enlarge their contribution to Minnesota by increasing the number of Minnesota residents being educated on their campuses. Many private institutions are meeting the needs of an increased number of low-income students who receive state grants-in-aid. As of the fall of 1972, the following institutions have been designated as eligible for participation: (See Appendix H for an itemization of awards each institution has received.)

Augsburg College
Bethel College
Carleton College
Concordia College, Moorhead
Concordia College, St. Paul
Golden Valley Lutheran College
Gustavus Adolphus College
Hamline University
Lea College
Macalester College
Minneapolis College of Art and Design
College of St. Benedict
College of St. Catherine
St. John's University
St. Mary's College
St. Mary's Junior College
St. Olaf College
College of St. Scholastica
College of St. Teresa
College of St. Thomas
William Mitchell College of Law

On the basis of the experience of the first two years and expectations for further development of the program potential, the Commission recommends:

That the Private College Contract Program be continued as constituted and that $5,600,000 be appropriated for services to be rendered under the contract for the biennium beginning July 1, 1973. (See Appendix I for an explanation of the estimated funds that will be required for the program.)

That the Higher Education Coordinating Commission assess the effects of the Private College Contract Program, since its inception, and make recommendations regarding the future of the program and alternatives to the Legislature in 1975.

The Minnesota Higher Education Facilities Authority was established by the 1971 Legislature to enable private post-secondary institutions to improve their physical plants by providing low cost financing for construction of new buildings or the replacement of old and/or obsolete facilities. Indicative of the need for the program and the backlog of capital projects that existed in private post-secondary institutions, the Authority has received applications for projects in an aggregate

amount of 22 million dollars (see Appendix U) or nearly one-half of the 45 million dollar authority granted to the Facilities Authority by the 1971 Legislature. The high level of interest on the part of private colleges and a successful bond issue demonstrate viability of the program. Based on present and projected demand for capital funds for the private sector, it is probable that project applications will exceed the $45 million authorization before the end of the next biennium.

Accordingly, the Commission recommends that the Higher Education Facilities Authority be authorized to issue bonds not to exceed $45 million during each biennium.

PART THREE: IMPROVING POST-SECONDARY EDUCATION THROUGH EDUCATIONAL RESOURCES AND PROGRAMS

XI. THE COORDINATED REVIEW AND USE OF COMPUTER TECHNOLOGY

Based on a report published in 1970 by the Governor's Advisory Committee on Information Systems, *Computers and Information Systems in Higher Education, 1970-1980,* the Commission recommended that all systems of higher education identify to the Commission their plans for computing for both facilities and operating costs in order that the Commission could review these proposals to determine how they were coordinated with the State Plan. This basic responsibility was approved by the 1971 Legislature and implemented by the Commission during the present biennium.

The Commission appointed a Computer Advisory Committee (COMPAC), consisting of two members from each public post-secondary system, two members from private colleges, plus one member from the State Department of Administration and one from the Governor's Advisory Committee on Information Systems to assist with the computer review process. Guidelines similar to those used for reviewing proposals for new institutional programs under the program review process were adopted by the Commission. (A copy of the Guidelines appears in Appendix S). The Computer Advisory Committee and the Commission staff applied the Guidelines to proposed new developments and reviewed the requests of the systems and prepared a report to the Commission summarizing the requests of the systems. The basis of the Committee's review of total requests for budgets for computer facilities and activities was the 1970 report of the Governor's Advisory Committee mentioned above which recommended a State Plan that would provide for the development of a computing capacity in Minnesota higher education that by 1975 would be adequate to meet two general goals:

1. "Provide educational computing services for all of higher education in Minnesota equivalent to that available at a few leading universities of the nation in 1967-68."
2. "Establish machine-readable data bases and an administrative data processing capacity which is sufficient to support the management information needs of institutions and systems of higher education and lay the basis for program planning and budgeting."[1]

Since the State Plan contained specific recommendations of facilities and costs through 1975, the Committee and the Commission were able to review the requests of the systems based on the specific recommendations and projections of the State Plan. The complete report of the Computer Advisory Committee, *Summary and Review of Computing Activities and Budget Requests for their Support in Minnesota Post-Secondary Education, 1973-75,* is contained in Appendix R.

In Table I are summarized the total requests from public higher education (not including the area vocational-technical institutes). These are compared in each case with projections from the Plan. (A more detailed discussion of each of the requests is contained in Appendix R.) This display also shows the effects of an estimated five percent inflation of the State Plan projections for 1973-75 (The Plan used 1970 dollars and took no account of inflation). From the standpoint of costs, it can be seen that the total funds expended and requested, when inflation is considered, are somewhat below the Plan recommendations — it has been possible

[1]Peter G. Roll and Peter C. Patton, *Computers and Information Systems in Higher Education: Part of Information Systems in the State of Minnesota 1970-80* (St. Paul: Minnesota Higher Education Coordinating Commission, 1970).

to save money over these recommendations while still making significant progress toward the functional goals of the Plan. Each of the systems of public higher education plans to have available by 1975 administrative computing capacity equivalent to that recommended by the Plan. All of the administrative applications envisioned may not be implemented by 1975 (though a large fraction will be). For educational computing, the University and State College Systems are progressing well according to the Plan recommendations. They will each have the capacity to serve their students near the level recommended in the Plan by 1975, if the budget requests can be funded. The junior colleges, on the other hand, will be functioning in 1975 at about half the level recommended in the Plan. This reduction is based on the experience of the past two years, which has shown that due to the dispersed nature of the system and the small size of many of the colleges, it is more difficult to educate the faculty and develop the instructional materials and applications for use in the junior colleges compared with the larger four-year institutions. The level of instructional computing proposed for the junior colleges is consistent with their needs as projected for the 1973-75 biennium, and a more significant amount of resources is being requested by the State Junior College Board to assist the junior colleges and their faculty in using the instructional computing services effectively in their academic and career-oriented programs.

Table I

TOTAL COMPUTING BUDGETS OF PUBLIC HIGHER EDUCATION COMPARED WITH STATE PLAN[a]

	1972-73		1973-74		1974-75	
	State Plan	Budgeted	State Plan	Request	State Plan	Request
University of Minnesota	$2,461,900	$2,064,000	$2,861,000	$2,574,513	$3,072,000	$3,051,994
State College System	1,650,000[b]	1,726,834	1,698,000[b]	2,087,934	2,048,000[b]	2,190,370
State Junior College	359,694	347,196	458,741	440,060	572,688	548,636
TOTAL	$4,471,594	$4,138,030	$5,017,741	$5,102,507	$5,692,688	$5,791,000
(Inflation effects of 5 percent)..			(250,887)		(284,634)	

[a]All State Plan estimates are in 1970 dollars.

[b]The State College System line uses the State Plan modified to reflect the decision to accelerate the planned upgrading of the St. Cloud facility and the need to upgrade Bemidji to third generation computing capability.

Based on its review of the requests of the three public systems of higher education and its review of the Computer Advisory Committee Report, the Commission finds these requests to be consistent with or reasonable deviations from the State Plan and, therefore, recommends their approval to the 1973 Legislature.

In addition to the requests of the individual systems which will enable them to improve the computing services of their institution, the Computer Advisory Committee identified other computing activities that have a statewide interest, and are therefore, not appropriately included in the requests of the individual systems. They include the need to improve the exchange and coordination of basic information and to expand and improve the review and coordination effort; the need to provide for the continued input of private post-secondary education into the coordination and review process; the need to enable institutions to expand their use of statewide time-shared computer facilities; and the need to improve the use of computer technology on the part of private colleges.

Accordingly, the Commission recommends that $185,000 be appropriated by the 1973 Legislature to improve the coordination, review and use of computer technology by Minnesota post-secondary institutions.

The specific purposes for which these funds are requested (in the priority order recommended by the Computer Advisory Committee) are outlined below:

1. *The establishment within the Higher Education Coordinating Commission office a position of Coordinator of Post-Secondary Education Computing.*

   Though Minnesota has made a great deal of progress in coordinating its activities in computing in higher education, there is a need for more effective and continuing exchange of information between Minnesota institutions and with other institutions and organizations in the nation. Further, there is a need for more regular continuing support of the time-consuming coordination activities which are necessary within Minnesota to implement the mechanisms established by the State Plan and to assist in the collection and organization of the information which is required for those mechanisms to work smoothly and effectively. During the past year, the coordination has been effected with excellent part-time assistance from the Commission staff and by dint of much hard work on the part of several Computer Advisory Committee (COMPAC) members. This effort will inevitably grow, and is more than can be sustained on a continuing basis by COMPAC members in addition to their regular institutional and system responsibilities. Therefore, COMPAC recommends the establishment of a staff position within the Commission to serve the needs of all post-secondary education by collecting and disseminating information among institutions in Minnesota and between Minnesota and programs in other states and nationwide; and by managing and supporting the activities of the Computer Advisory Committee and its working subcommittees (at present the Technical Standards Subcommittee and the MERITSS Policy Advisory Committee).

2. *The establishment of a fund for the reimbursement of non-publicly funded private colleges providing staff or facilities for use in statewide projects. (Approximately $35,000)*

   Over the life of the Computer Advisory Committee and other similar coordination activities, staff members from private colleges have made *major* contributions to the planning and programs that have developed. They have done this at considerable expense to their institutions and to their personal lives. Because of limited funds and staff, at least two individuals from private colleges have been asked by their administrations to limit or terminate their participation in statewide coordination activities. The Computer Advisory Committee feels that the state cannot afford to be without the expertise and the viewpoints that reside within the private colleges. Therefore, they recommend the establishment of a fund within the Higher Education Coordinating Commission to reimburse private colleges for the services of their staff members as consultants or major participants in coordination activities, and for the use of their facilities, when these services and facilities will benefit all of Minnesota higher education.

3. *The establishment of a fund to support the use of the statewide time-shared computer facility for research and development projects, innovative instructional usage, or ongoing activities. (Approximately $45,000)*

   Many institutions of post-secondary education are in need of time-shared computing facilities to enhance the quality of and supplement current programs, and to establish new programs of quality education to meet developing needs. However, many institutions simply lack the funds to

meet these goals, knowing how recognizable and worthy they may be. This is especially true for the private colleges. To meet this need, it is recommended that a fund be established to provide fifty percent matching grants for computer time (port charges) on the statewide time-shared computing facility (MERITSS). These grants would not support costs of terminal equipment and communications. They would be awarded on the basis of the merits of proposals submitted and the consideration of previous legislative funding to the requesting institutions.

4. *Subsidies for computing costs incurred by private colleges for instructional and administrative computing utilizing publicly-supported facilities. (Approximately $85,000)*

   Since the private sector accounts for twenty-five percent of all students in Minnesota higher education, it is important that the quality of education and the quality and quantity of computing services be near the same level as in the public systems. It has been indicated elsewhere in this report that although the private colleges collectively are spending a substantial amount of money on computing, they are not, in general, achieving a level of computing services equivalent to that in the public institutions. The purpose of this recommendation is to provide assistance which will be necessary to some colleges if they are to have access to adequate computing services for their students, and to provide an incentive to use shared facilities in the public sector which ultimately will be less expensive for all concerned. It is proposed that these funds be distributed in the form of grants covering no more than fifty percent of the computer service costs, not including terminal equipment and communications. A similar recommendation in the 1970 State Plan for $35,000, $70,000, $105,000 and $140,000 respectively for the years 1971-72 through 1974-75 was not funded.

Finally, the Commission has reviewed efforts throughout the state to plan for the development and application of computer technology to education beyond 1975. A major thrust in this regard is a plan that would link all educational computing activities in the state. This plan is sponsored by the Governor's Joint Committee on Computers in Education, and it is investigating the establishment of a consortium arrangement to provide computing and data processing services to all educational institutions in the state. The Commission recognizes that many details and specifics in the consortium plan need to be refined and further developed. Nevertheless, the Commission views this type of cooperative development as a potential long-range benefit to the state by providing a mechanism for more efficient use of scarce resources.

Consequently, the Commission endorses the concept of a consortium for providing computer services for all educational institutions (elementary and secondary as well as post-secondary) and urges that planning for such an arrangement should continue.

XII. EXPANDING AND IMPROVING USE OF TELEVISION IN POST-SECONDARY EDUCATION

Commercial and educational broadcast television have had a profound impact upon the lives of most Americans. The average citizen no longer is exposed only to verbal or written reports of events which influence the course of history. He now can see and hear, through television, what has occurred and often what is occurring. Television has become such an important and commonplace part of everyday living that it is now difficult to imagine what our society would be like without it.

Anyone who doubts the great power of effectively-used television upon opinions, attitudes, and information acquisition of the citizens of this country need only be reminded of the impact of television news coverage and the billions of dollars which advertisers find it profitable to expend for television commercials. Largely because of television, Americans know more than ever before about current events and products which are available for purchase.

Lacking the resources of the business community, use of television for instructional purposes in colleges and universities has lagged far behind the rapid and impressive development of commercial television.

The 1965 State Legislature in recognition of the potential educational uses of television instructed the University of Minnesota to conduct a feasibility study of inter-institutional educational television. This study recommended the establishment of nine regional instructional television production centers and the development of inter-institutional instructional materials via television. The cost of implementing the recommendations of the feasibility study was estimated to be $2,712,134.

The 1967 Legislature initiated the program by funding two regional television production centers to serve inter-institutional needs and seven classroom television production units to provide some experience with instructional television within institutions located at state-supported institutions of higher education. The television centers established at Mankato and Moorhead are open to all post-secondary institutions in their respective regions and with the seven classroom units have been actively developing the medium of television to improve instruction and extend the boundaries of the classroom.

The 1969 State Legislature appropriated $540,000 to establish a third regional production center, to complete the two regional production centers established by the 1967 Legislature, and to develop inter-institutional educational television instructional materials. Winona State College joins the Mankato and Moorhead Regional Centers (both monochrome) as the first all color regional center. The continued development of the inter-institutional television was facilitated by a $230,000 appropriation for developing instructional materials from the 1971 Legislature.

Minnesota's three regional television production centers (at Mankato, Moorhead and Winona) surpass the role of the traditionally equipped intra-institutional television facility. Their primary purpose is to serve *externally* on an inter-institutional basis. Their clients include institutions of post-secondary education from both private and public sectors, vocational-technical institutes and trade schools, as well as training programs in mental institutions, neighboring elementary and high schools and civic and professional groups. The regional centers have been the most frequent proposers of inter-institutional television projects. Of the total 109 projects funded, 71 have been developed by regional centers.

Regional centers serve first their regional areas, but because only three centers exist, they also have to endeavor to serve statewide needs. Associations between centers, institutions, even state agencies know no bounds. Projects are being developed by consortia of institutions located throughout the state, and in some instances several centers cooperate on a single production. The concept of inter-

institutional sharing is alive indeed, and with adequate resources this accomplishment can enrich post-secondary education on an increased scale.

The experimental classroom centers at the Bemidji, St. Cloud and Southwest State Colleges and on the Duluth, Morris and Twin City campuses of the University have as a major function determining how television can best be used on an intra-institutional basis. These centers have aided in the initiation production of some inter-institutional work. These centers also serve as a laboratory in which students may become familiar with the use and care of equipment and the production of television lessons. Further, they provide nearby institutions the opportunity to observe ways in which television can be used for instructional purposes.

Instructional materials development is designed to encourage the sharing of existing resources by the use of inter-institutional television. Specifically, this is accomplished by increasing the use of existing quality T.V. materials, by increasing faculty knowledge about T.V. capability, by increasing faculty skill in the use of T.V. for instruction, and by increasing cooperation among institutions. The foregoing efforts are the inputs toward accomplishing the major goals of the inter-institutional statewide television program of improved instructional effectiveness and efficiency.

The accomplishments of the program have been significant. In addition to providing workshops, seminars, and formal coursework in the television arts, the regional television centers provide extensive services to many institutions (such as dubbing and editing), they serve as a clearinghouse of information on the use of instructional television, and they have stimulated faculty throughout the state and in all systems and sectors of post-secondary education to make increasing use of instructional television. Examples of the use currently being made of instructional television include micro-teaching, where the student teacher can observe the results of his efforts on video tape while receiving an evaluation by his peers; the image magnification to show microscopic results to the entire class simultaneously; the taping of lectures for later use or for wider distribution and many others. In addition, a directory of the hundreds of instructional materials which have been produced at the various television centers in the state has been published.

This directory has been distributed throughout the state and the materials are used throughout the educational systems of the state.

In order to provide for the continued development of the inter-institutional television program to areas and evaluate the program, to provide for the expansion of the regional production centers, and to provide for the replacement of worn-out or obsolete equipment, the Commission recommends that $1,181,000 be appropriated by the 1973 Legislature.

The proposed allocation of these funds is as follows:

1. *Inter-Institutional Development Projects ($490,000)*

   This item requests funding for project grants to develop and produce closed circuit television instructional materials for coordinate use by state colleges, University, private colleges and expanded utilization to include more state junior colleges and vocational-technical institutes. Projects developed at regional production and classroom centers are utilized for instructional purposes by the producing and maintaining projects plus involvement of increased inter-institutional use of projects at more state junior colleges and vocational-technical institutes.

2. *Planning, Research and Feasibility Study Update ($45,000)*

   A review of the 1965 Feasibility Study is needed to assess and evaluate the overall program since its inception, ascertain whether original recommendations need revision or updating, and recommend plans on how to facilitate greater and more effective usage at additional institutions includ-

ing state junior colleges, vocational-technical institutes, private colleges, private junior colleges and proprietary schools. With rapidly changing technology and its applications for educational uses, an up-to-date appraisal and recommendations are imperative to meet the needs of the '70's.

3. *Regional Production Centers ($396,000)*

   Three regional production centers are established and operating (Mankato, Moorhead, Winona). *Two* additional centers are needed to help meet increasing *statewide* needs. The 1966 feasibility study recommended nine centers. If five centers are established, a feasibility update could address itself towards the desirability of how many centers are needed to fulfill statewide post-secondary educational needs.

4. *Regional Center and Experimental Classroom Center Improvement and Replacement of Equipment ($250,000)*

   Obsolete or worn out equipment and hardware at the first two regional centers should be replaced for optimum efficiency and performance. In addition, with the increasing importance of color television, funds are requested to upgrade the existing monochrome centers and experimental classroom centers to provide for color production and playback. The only center currently with color capability is at Winona.

Finally, the Commission reaffirms the original recommendations of the 1965 Feasibility Study that the Higher Education Coordinating Commission be responsible for management of inter-institutional television in Minnesota. The uses and application of television for post-secondary education transcend institutional and system boundaries. The Legislature has supported this concept. The Commission believes this procedure is still valid in order to maintain maximum potential of the program on a statewide basis.

XIII. EXTENDING LIBRARY RESOURCES TO STUDENTS, FACULTY AND CITIZENS

In January, 1969, a two-year pilot demonstration project (Minnesota Interlibrary Teletype Experiment) was funded by the joint efforts of the Louis W. and Maud Hill Family Foundation and the Library Division of the State Department of Education through its LSCA Title III program. The project was designed to test the feasibility of sharing the University of Minnesota library resources with outstate libraries.

As a result of the success of the two-year project, the Higher Education Coordinating Commission requested and the 1971 Legislature funded a teletype custom-service library program for academic institutions in Minnesota. As implemented, the MINITEX program (Minnesota Interlibrary Teletype Exchange) includes an expanded and expedited interlibrary loan service, a bibliographic data base (Minnesota Union List of Serials), and a viable TWX communication network. The program is a beginning stage of a major library service which has the potential of facilitating maximum and multiple use of state library resources, of making judicious use of available funding, and providing the basis for sound development of collections by participating libraries. A history of participation by libraries and institutions in the program is provided in Appendix O.

The purpose of MINITEX is to provide maximum and equitable multiple use of Minnesota library resources with a minimum of effort and without conflict of interest. The program is based on the assumptions that no library can be self-sufficient and that no library can be responsive to all user demands individually. Recognizing that recurring needs are not only best met, but must be met locally, and that each academic institution must provide the collection to support its curriculum, some cooperative program is essential. MINITEX helps in this by supplementing local resources and enables libraries to provide service which would be difficult to offer independently.

In times of cost escalation, insatiable user demands, uncertain funding, and the literature/information explosion, cooperative use and planning is essential to make judicious use of available funding. Individually and corporately, there is awareness of the inadequacies in library resources and the concomitant effect they have on the ability to provide quality education. Individual libraries are not likely to ever be able to adequately support the educational missions in Minnesota. MINITEX is specifically designed to assist in bridging the gap that these present and future inadequacies pose.

MINITEX provides access for students and faculty at all four-year accredited and most of the state junior colleges (four University, six state colleges, 16 private colleges, and 17 state junior colleges) to the research resources of the University of Minnesota Libraries. Specifically, it has provided approximately 175,000 items during the biennium, 1971-73.

By negotiating a reciprocal system-to-system arrangement with CLIC (a library consortium of seven private metropolitan colleges and the James J. Hill Reference Library) the program was extended to all private colleges including those in the Twin Cities not specifically covered by the appropriation. Furthermore, by utilizing MERITSS, the Time-Shared Computer System provided by Legislative appropriation, enough economies were gained to add more state junior colleges than originally anticipated.

Access is provided to all other Minnesotans through their Regional Public Libraries, and this portion of the program is supported by state and federal (LSCA Title III) funds administered by the Library Division, State Department of Education.

The program has developed the foundations of a Minnesota bibliographic data base (Minnesota Union List of Serials). MINITEX has allocated approximately

25 percent of its appropriation for this project in order to allow patrons to make their selections from owned sources, (approximately 10 percent of the requests are for items not owned by the University) to allow more equitable and efficient sharing of state resources, and to provide for orderly statewide collection development.

The program also provides the communication network to facilitate sharing, expedite out-of-state interlibrary loans, and aid in the ordering and processing of materials.

The program has served as the catalyst for local sharing. This has been especially significant in locations of multiple academic institutions, i.e., Duluth, Mankato/St. Peter, Moorhead, Northfield, St. Cloud/Collegeville/St. Joseph, and Winona. The pilot demonstration project served as an example and the participants agreed to share their resources with each other. Providing the model, MINITEX has encouraged the significant advances in reciprocal borrowing, exchange of bibliographic data, joint collection development, courier service, and liberalized circulation policies that have increasingly taken place among the participants.

The program has assisted in identifying local staff needs. By designing a system which assures local resources are exhausted first (requiring a librarian as access provided many new contacts with patrons and offered opportunities to utilize their own collections), many libraries found it necessary to shift additional staff to reference and public service. Many directors reported that their self- and campus-image experienced significant change as they more actively participated in the educational mission of their institution.

The primary value of MINITEX has been its contribution to quality education in Minnesota. It is estimated that a third of the academic faculty members outside the University's Twin Cities Campus have utilized the service to prepare their course presentation. Additional faculty utilization aided ongoing scholarly research or writing. Many faculty have testified to its usefulness in completing their degree. Most of the student use has been course related. Students have been allowed to pursue projects which are of primary interest and have become increasingly aware that information is available (identifiable and accessible) on almost any subject. Nationwide there has been a shift to independent study and adaptation to this trend simply would not have been feasible in Minnesota without the comprehensive research back-up provided by the University library resources.

There has been a significant contribution to the medical care, industrial development, and government administration in the state. Doctors, businessmen, and government officials effectively use the system through their public libraries. The fact that research resources are accessible to all who have information needs certainly adds to the quality of life in Minnesota.

An assessment of the MINITEX experience to date and its future development led to the identification of the following immediate and long-range objectives:

1973-1975

1. Continue expedited interlibrary service to all accredited (collegiate) institutions. Explore the possibilities of cooperation and sharing with the technical-vocational institutes.

2. Complete the state bibliographic periodical data base including built-in update and annual publication and distribution to all participants.

3. Encourage regional planning and development.

4. Develop state library resources by identifying and purchasing unowned and useful titles. Provide MARC tapes and access to data banks.

Long Range

1. Serve on an ongoing basis the needs of post-secondary education.

2. Become an integral part of the statewide library network including complete bibliographical data base, cooperative collection development, computer retrieval, cooperative processing, etc.

3. Explore the possibilities of personnel sharing both as a learning process and the sharing of expertise.

In order that continuing service may be provided under the MINITEX program and that the program may be further developed according to the objectives for this biennium, the Commission recommends that $597,200 be appropriated for the following purposes:

NEEDS (for the 1973-1975 Biennium)

Inter-Library Service ($440, 000)

Expedited interlibrary service to all accredited (collegiate) institutions. Based on 100,000 items per year at a cost of $2.00 per request = $400,000. Ten percent overhead to the University Libraries.

Serial (Periodical) Data Base ($57,200)

Maintenance, update and annual publication and distribution of the serial data base (MULS: Minnesota Union List of Serials). Based on an estimated 11,000 annual update items at $1.00 per item = $22,000 and 44 copies at $4.00 to be distributed annually = $32,000.

Regional Sharing ($28,000)

Regional sharing development. $4,000 each to CLIC, Duluth, Mankato/St. Peter, Moorhead, Northfield, St. Cloud/Collegeville/St. Joseph, and Winona to encourage and support regional sharing, planning and development of resources. To be used for direct services.

Unique Collection Development ($72,000)

Development of state resources. Identification, purchase, and dissemination of microfiche, microfilm collections, MARC tapes, data banks (Atomic Energy Reports, U.S. Patents, selected categories of government documents, census tapes) and other resources or services as needed in the state but not now owned by any library.

Inter-Library Service

The value of interlibrary service in Minnesota has been amply demonstrated by the volume of use to date. Conservative estimates suggest a volume of 100,000 requests annually from the academic institutions will be the pattern of the future. During the project a concerted effort has been made to discover the most economical methods and procedures. As a consequence, and in spite of increasing costs, the unit price has continuously decreased. It may be of interest that the national average for interlibrary service is $5.60 per transaction. This is not for expedited service; therefore, it does not include the benefits or the costs of TWX, photoduplication, and United Service delivery.

Serial (Periodical) Data Base

While the sharing of resources (interlibrary service) is important, the real benefits, both educationally and economically, will accrue from a state bibliographic data base. The knowledge of what is owned and where located is essential in order to make full utilization of all state resources and to engage in meaningful long-range planning and collection development. It is the essential key to eliminating unnecessary duplication and gaps. The unprecedented spiraling costs of periodical purchase, processing, storage, bindery and retrieval necessitate overall planning in order to make judicious use of available funding.

While MINITEX has used $80,000 of its 1971-73 appropriation, at least an additional $150,000 was secured to construct the machine readable basic bibliographic data base. This is simply too valuable not to be maintained.

Regional Sharing

The purpose of the initial project was to test the feasibility of sharing the University library resources with other Minnesota institutions. It is axiomatic that some sharing of and development of resources can and should be done on a regional basis. There are many research items that are rarely used and therefore, one copy is adequate for the entire state. There are other items which are needed in five or six regional locations. And, of course, there are some items that must be duplicated in each library.

Funds in this category could be most effectively used regionally to provide courier, communication or photocopy services. They would also support and encourage cooperative use of resources.

Unique Collection Development

Through the MINITEX requests it has been possible to identify needed items which are not available in the state. No institution could currently justify purchasing most of these items, but collectively they are certainly needed. If the MARC tapes (already purchased by the University) could be selectively disseminated, tremendous time and cost savings would be gained in the purchasing and cataloging procedures at the individual libraries. There are also data banks which should be available. While specific titles with cost estimates could be given, careful attention must be given to the choices in the future.

PART FOUR: IMPROVING POST-SECONDARY EDUCATION THROUGH EXPANDED COOPERATION AND COORDINATION

XIV. EXPANDING INTER-INSTITUTIONAL COOPERATION IN MEETING REGIONAL NEEDS

At the request of Governor Anderson, the Commission initiated a special study of cooperation among Minnesota institutions of post-secondary education. The results of this study, the report on which is published separately, indicates that (1) while there are some excellent examples of inter-institutional cooperation among Minnesota post-secondary education institutions, the potential for increased effectiveness through inter-institutional cooperation is far from being achieved and (2) most significant instances of inter-institutional cooperation involve either institutions within a single system or institutions located in close geographic proximity.

The apparent potential for inter-institutional cooperation among institutions located in the same geographical area provides a basis for addressing the recent resurgence in the concept of regionalism as it relates to activities of government and meeting social needs. While all Minnesota post-secondary education institutions have demonstrated a sense of responsibility for meeting needs of the residents of the area in which the institution is located, and some Minnesota institutions were founded largely to meet regional needs, there is less evidence of an effective sense of joint responsibility among institutions in the same area to serve that area. In addition, except in those instances where attention has been focused on establishing new institutions, planning activities generally have related to system-wide and statewide concerns or individual institutional concerns rather than to area concerns.

In view of the above considerations, the goal of stimulating greater and more effective inter-institutional cooperative efforts can appropriately be approached through the initiation of new structures and mechanisms for stimulating joint responsibility and cooperative planning with respect to meeting area needs by institutions within each area of the state. Not only will such an approach stimulate greater cooperation among institutions from different systems, but it can provide effective responses to the resurging interest in regionalism and the legitimate concern for addressing attention to problems and needs on an area basis.

In viewing the resurgence of regionalism and gauging responses to it, some contemporary realities deserve recognition. First, it is apparent that higher education has now emerged from a period of intense growth accompanied by relatively clear mandates into a period characterized by uncertainty, rapid change, and greater competition for limited resources within the context of ambiguous mandates. Second, it must be recognized that Minnesota and other states are encountering increasing local and federal pressure to incorporate sub-units of the state in planning for the use of fiscal, natural, and human resources in meeting the range of human needs of the future. There is substantial support for this approach especially where the participation in past planning decisions has been consistently low. Finally, because all post-secondary institutions have a common stake in the future of post-secondary education in this state, without deliberate attempts to increase the coordination and cooperation of activities the future for each of the post-secondary institutions will be collectively diminished. Interest in general regional planning, however, must recognize the specific concerns of post-secondary education institutions. In view of the complexity of challenges, balanced perspectives and flexibility are essential, for the challenges will not be met successfully with a single approach nor with dogmatic strategy. The diversity among Minnesota post-secondary educational institutions and the differences in style among them constitute a source of great strength which must be protected and fostered.

Accomplishments of Minnesota institutions in increasing their cooperative efforts are illustrated by the following examples:

1. Institutional consortia such as the Tri-College University, the Arrowhead Consortium, and the Urban Consortium.
2. Southwest Consortium for Community Service.
3. Central Minnesota Public Service Consortium.

Each of these programs was designed to increase the margin of institutional response to area-wide needs, and although they have had high levels of success, much more remains to be accomplished. There have also been statewide efforts which have strong regional planning components:

1. Study of post-secondary needs for Regions Nine and Ten.
2. Computer budget planning and development.
3. Inter-Institutional Television Program.
4. Inter-Institutional Library Program.
5. Agricultural Extension Service.
6. Academic Program Review.
7. Reciprocal agreements with other states for resident-tuition.

The examples cited reflect a record from which we may take pride, but from which we must now expand. The possibilities for expansion are manifold and might include:

1. Increased use of area-wide or multi-institutional faculty appointments;
2. Expanded development and use of educational television and radio for academic programming;
3. Increased inter-institutional coordination in public service projects;
4. Regionally based external degree and correspondence programming.

Exploring these and other possibilities could result in an increased regional focus by greater institutional cooperation among post-secondary educational institutions of the state on area-based social, educational, and economic problems. If approached in a cooperative spirit, these additional contributions could be viewed as those emanating from a partnership in which each has a stake in the resolution of area problems, rather than an attempt by the institutions to dictate both the definition and solution of problems.

As a means of facilitating increased inter-institutional dialogue and cooperation, the Commission proposed to establish regional advisory committees throughout the state. These regional advisory panels would offer the probability of developing a forum for the discussion of unique area problems and the alternatives available for solving them. The committees would also serve as an additional body to articulate the needs of the area to neighboring regions and statewide agencies.

It is proposed that the regional post-secondary advisory committees be charged with such responsibilities as:

1. Exploring the possibilities and facilitating the implementation of substantive inter-institutional cooperation among the post-secondary institutions of the area.
2. Cooperating with existing and future regional planning commissions to improve the total regional planning effort.
3. Assisting in the assessment of regional post-secondary educational needs.

4. Working with the HECC liaison staff and making recommendations to the Higher Education Coordinating Commission.
5. Coordinating the identification of regional community service needs and the existing institutional resources which could be marshalled to meet such needs.

Memberships for the regional advisory committees will be drawn from the post-secondary education institutions of the region, but not be so great in number to hamstring the effectiveness of the group. The differences among the state planning regions suggest that the composition of each group should vary both in size and representation. It is also possible that two or more State Planning Regions could be combined to identify the area to be served by an advisory committee. Any combination of planning regions could be based on existing inter-institutional cooperative efforts. The Commission is prepared to provide staff liaison with the advisory groups and to assist in fostering their initial development.

XV. THE RELATIONSHIP BETWEEN AREA VOCATIONAL-TECHNICAL INSTITUTES AND JUNIOR COLLEGES

In recent years, considerable attention has been focused on the relationship between area vocational-technical institutes and other institutions, particularly state junior colleges. Interest in this matter has ranged from questions as to the possible need for clarification of institutional roles, to the possible need for greater cooperation between area vocational-technical institutes and junior colleges, to the proposals for merging the two types of institutions and for merging the two systems.

The basis for concern about the relationship between junior colleges and area vocational-technical institutes emanates from the facts that (1) the state provides substantial support for both types of institutions, (2) the state has authorized establishment of 53 non-senior, or lower-division, public institutions including 20 state junior colleges and 33 area vocational-technical institutes and (3) the geographic proximity of junior colleges and area vocational-technical institutes is extreme to the point of both institutions being located within 35 miles of one another in many instances and both institutions being located in the same community, even in communities with relatively limited population. In addition, the functions of the two types of institutions overlap. Junior colleges offer terminal vocational programs as well as programs designed to transfer to a senior institution. While area vocational-technical institutes offer terminal vocational programs only, a recent trend in the direction of accepting area vocational-technical institute courses in transfer by senior institutions raises further questions as to the extent to which the functions of the two types of institutions are in fact distinct from each other.

In response to a request by the 1969 Legislature for "an inquiry into the relationship between area vocational-technical schools and other institutions of higher education in Minnesota," the Commission developed a general guideline for differentiating the role of public post-secondary institutions in offering vocational programs. The recommended guidelines, similar to those presented to the 1971 Legislature, are as follows:

> Occupational programs should continue to be offered by all types of post-secondary institutions. Area vocational-technical institutes should continue to offer a wide range of programs of two years or less which provide for initial occupational entry and retraining for advancement and occupational adjustment. State junior colleges located in areas which are not served by area vocational-technical institutes should offer the range of occupational programs which would be provided by an area vocational-technical institute if one were located in the area. State junior colleges located in areas which are served by an area vocational-technical institute should offer a more limited range of occupational programs, depending on the population and needs of the area, with emphasis on programs of two years in duration and those which are most closely related to the academic programs of the institution. Public four-year institutions should offer occupational programs of more than two years in duration. Four-year institutions which are located in areas served by area vocational-technical institutes, but not by state junior colleges, also should offer some occupational programs of two years or less with emphasis on two-year programs which are closely related to their academic programs in order to meet the commuter needs of the area. Four-year institutions also may appropriately offer a limited number of terminal occupational programs of two years or less for experimental or laboratory purposes or to meet the needs of students for whom completion of a four-year program is determined not to be an appropriate goal.
>
> Proposals for establishing new public post-secondary institutions for all types should be reviewed by the Higher Education Coordinating Commission which should recommend legislative authorization for all proposed institutions receiving favorable review by the Commission.

Expanded cooperation between and among all higher education institutions offering occupational programs, which are located in the same or neighboring communities should continue to be encouraged. Economic incentives should be provided for those institutions which seek to adopt cooperative programs and which seek to add programs which are judged to insure that educational opportunity is made fully accessible to as many Minnesota residents as practical.

Economic incentives might include (a) additional state funds for cooperative, interinstitutional planning of educational services; (b) additional funding for providing courses amounting to an extension of institutional services on an overload basis; (c) equalization of tuition and fees where an institution has provided expanded cooperative programs; and (d) institutional reimbursement from state funds for interinstitutional use of facilities based upon a state average rate for operating maintenance funds.

Areas of cooperation might involve (a) joint program planning; (b) sharing the time of administrators and instructors where desirable; (c) encouraging students enrolled in one institution to take some work in the other institution assuring that credit earned will be accountable on an educational program where practicable; (d) use of auxiliary facilities, such as cafeterias, libraries, auditoriums, and gymnasiums by students of both institutions to the largest extent possible; and (e) operating joint extracurricular programs.

The policies established by the 1967 and 1969 Legislatures in seeking to improve the availability and accessibility of advanced educational opportunities to Minnesota residents through reciprocity agreements with neighboring states should be continued and extended.

The state of Minnesota should not only discourage unwarranted proliferation of occupational programs, but should also generate information to identify programs required to meet current and emerging needs in vocational and occupational areas. All institutions which conduct vocational-technical programs should follow, to the largest extent possible, a policy of qualifying for reimbursement from federal and state funds administered by the State Board for Vocational Education.

Area vocational-technical institutes prepare students for occupations through their programs by emphasizing job entry criteria. The University of Minnesota, with its programs in the General College and its Technical Colleges, tends to offer special occupational programs and substantial numbers of general academic curricula at the two-year level. State junior colleges offer all types of programs, many of which correspond with programs in area vocational-technical institutes and others which are geared to more general academic and occupational objectives. The primary emphasis of state junior colleges has been in the area of transfer programs. State colleges have offered some two-year programs in the past as a practical accommodation to their local and regional community needs when the curriculum could take advantage of specific efforts in existing four-year baccalaureate programs.

The area vocational-technical institutes within Minnesota provide most of the occupational programs available in the state (72 percent of the total offered). These schools are widely distributed geographically as are the state junior colleges, and to some extent, the state colleges and the University of Minnesota. Although some institutions exist virtually along-side others within a local community, most of the institutions are within individual communities serving somewhat specific groups of students. For instance, high school juniors planning attendance at area vocational-technical institutes have definite ideas regarding their objectives for post-secondary training and are more decided in this regard than students in any other group. Occupational objectives are uppermost in the minds of these students. They appear to know that area vocational-technical institutes are mainly vocationally or occupationally oriented in their

efforts. Students choosing area vocational-technical institutes are more interested in practical pursuits of business and finance, as well as health, trade, and industrial areas. College freshmen interests are substantially different from those of the area vocational-technical institute-bound students. Junior college freshmen are similar in their chosen majors to state college freshmen.

There are substantive differences in the background qualifications and loads of teaching staff found in the various institutions offering post-secondary occupational programs of two years or less. Academically-oriented institutions tend to recognize post-baccalaureate degrees earned by teaching staff in their salary schedules to a greater extent than do the area vocational-technical institutes. It is possible that future cost studies may reconcile these differences in sources of support and staff reimbursement for post-secondary programs.

Students enrolled in two-year post-secondary programs in Minnesota represent a broad cross section of academic aptitudes, interests, and backgrounds which reflect the general population of the state. While each institution and system could claim some degree of representation in each group of students, there is evidence to support the view that a particular type of institution attracts students who are generally similar in aptitude and background. In other words, specific programs of institutions and systems relate better to certain types of individuals; and programs among the different institutions and systems are not necessarily the same in specific content. Even though programs may receive similar titles within the state systems, the students to be served would require some differences in approach to programs and, therefore, greater diversity of educational effort on the part of institutions.

While the institutions may present quite similar programs, the results achieved with students would likely be quite different. Evidence available from a study of differential results of approaches to occupational education indicates, however, that the most important considerations in determining results or output are the student characteristics. Included are student aptitudes, backgrounds, attitudes, maturity and aspirations. Any similarities or differences in program inputs and outputs would largely be affected by student-related inputs.

If all two-year post-secondary institutions were to be governed as one structure, students would have the same choices as they do now but within one administrative structure. The local governance in the area vocational-technical institutes would be lost if all systems were to be combined.

There is a question as to gains, administratively, in generating a new central staff necessary to support such a large combined organization. The separate systems should not be allowed to grow, however, to the extent that they would offer overlapping opportunities.

The industries that are expected to need the largest numbers of persons by the year 1975 are trade, government, service, manufacturing and construction, which, for the most part, will require persons with occupational training. There will be needs for training and retraining in order that skills may be kept up to date because of rapidly changing technologies. All systems should look toward accommodating more students in the vocational-occupational area.

A compelling view associated with all programs as they relate to changing societal conditions is the need for broadened perspectives of programs to benefit students, for example, in taking advantage of necessary retraining when jobs change and for incerased leisure time activities as they become more prevalent. Comprehensive program settings can emphasize additional preparation to allow students to accommodate to retraining and to utilize effectively their free time away from work.

It would seem that the options available are: (1) to create a statewide structure for governing all two-year post-secondary programs, or (2) the coexistence

of local and statewide governance with additional mechanisms to insure coordination and cooperation in funding and in program maintenance and development.

Cost information resulting from staff studies revealed sources of revenue to the state junior colleges and area vocational-technical institute systems. It cannot be concluded that one system is more costly than another.

Since the area vocational-technical institutes and the state junior colleges serve substantially different populations and employ somewhat differing approaches, it can be considered that these costs would be changed only slightly with administrative reorganization if the amount of educational service is to be maintained.

From a study of governance systems in other states, it was learned that post-secondary institutions and systems of the 11 states surrounding Minnesota offered no consistent trend toward change in two-year post-secondary governance which may be said to be superior to the present systems in Minnesota. Two states have recently moved to adopt the community college concept while other states are generally remaining with a more diversified approach, which is being used somewhat successfully, in Minnesota. Our institutions and systems appear to be providing as much or more educational opportunity at this level than in surrounding states.

Existing public post-secondary institutions can offer substantial numbers of programs throughout Minnesota, carrying with them the main thrust of a goal for accessibility of post-secondary educational opportunities at the two-year level. These institutions assure that most Minnesotans have ready access to at least two years of post-secondary education.

The Minnesota Higher Education Coordinating Commission has, as one of its objectives, to plan for and achieve some form of post-secondary opportunity within a 20-mile radius of all major concentrations of the Minnesota population. At the two-year post-secondary level this goal has nearly been achieved. Area vocational-technical institutes and state junior colleges exist in most population density areas of Minnesota.

It should be noted that all public post-secondary institutions currently require legislative endorsement prior to establishment, with the exception of area vocational-technical institutes. To assure that an elected governmental body will be continually apprised of the total post-secondary needs and status of the state, it should be considered essential to report such actions to the Minnesota Legislature.

The guidelines adopted by the Commission and recommended to the 1969 Legislature ("Making Institutions Accessible" of *Proposal for Progress,* January 1969), and Commission enrollment projections, indicate that students seeking occupational and vocational programs can be accommodated through the year 1978 and thereafter by presently existing, (Commission-recommended, and legislative-authorized) post-secondary institutions, with the addition of a state junior college in St. Paul.

Cooperative efforts among post-secondary institutions offering occupational programs are tending to increase slightly. Most cooperation is happening between an institution and its community rather than as part of any inter-institutional post-secondary effort. It appears that the crucial point for maximizing post-secondary educational opportunity for all residents of the state is in the area of establishing and coordinating development of appropriate cooperative efforts among institutions. If it is accepted that students served by different systems vary in educational needs, interests, and aptitudes, and that this variance is consistent within a system, and each system and institution has its educational task to perform, it would follow that institutions of each type should

be provided within an accessible distance to each population center. Realizing, however, that this could result in ineffective use of resources in some areas, it is the position of the Commission that total tasks of maximizing post-secondary education resources in the state can be facilitated best by strengthening cooperative arrangements and articulation methods between and among the institutions and systems which are capable of participating in such activity. For example, in communities where area vocational-technical institutes exist as the only post-secondary institution, arrangements might be made to provide general academic transfer curricula in the home community by allowing an affiliate college to offer coursework which could be coordinated with the area vocational-technical institute programs, and credit earned might be recognized in transfer to another college. Likewise, state junior college, university, and state college campuses where vocational and occupational programs may be needed could be served by faculty from a neighboring area vocational-technical institute. In addition, a vocational program could be contracted for or could be established as an ongoing program where need is evident.

Vocational and occupational programs and general academic programs have been developed in response to two fundamentally different educational philosophies. On a continuum where these philosophical bases would represent the extremes, at one end would be found the vocational orientation with objectives related to skills and knowledge for specific jobs or occupations; the other would be representative of an ideal general academic curriculum with its objectives relating more to a universe of knowledge and understanding of processes. None of the Minnesota post-secondary institutions or systems completely represents either extreme, at the two-year post-secondary level, although the area vocational technical institutes are nearer to the vocational orientation by concentrating on a large quantity of programs in the occupational areas. No other institution or system totally represents the opposite end.

The enrollments which have been projected by the Commission, in cooperation with the post-secondary systems, would indicate that occupational and vocational students who will need to be accommodated in various types of Minnesota post-secondary institutions in 1978 will be accommodated by presently existing Commission-recommended (including a St. Paul State Junior College), and legislature-authorized institutions in Minnesota. Additional capacity may be added at existing or planned institutions, but no additional new institutions seem necessary to provide these programs at the present time.

A source of institutional support has been allotted by the State Board for Vocational Education for two-year vocational programs.

In addition, the Commission proposed that the 1971 Legislature give statutory responsibility to the Commission for coordinating the development of new instructional programs, including vocational programs, to be offered in or by all public institutions of post-secondary education. While the 1971 Legislature did not take specific action concerning the recommended guideline on vocational education in the several types of post-secondary institutions, the proposed policy seemed to be viewed favorably. The 1971 Legislature did pass legislation giving the Commission responsibility for program review.

In implementing program review, the Commission has followed the policy guideline and a concerted effort has been made to act on proposals for new instructional programs in such a manner as to preclude any unwarranted duplication between area vocational-technical institutes and junior colleges as well as other institutions. The program review process has proven to be an effective mechanism for monitoring the relationship between area vocational-technical institutes and junior colleges as well as the relationship among other institutions of post-secondary education. The potential of the program review process clearly has not as yet been achieved and the process can be developed more fully as further refinements are instituted during the next biennium.

Effective implementation of the program review process and the policy guideline on vocational program offerings represent an effective response to the "bill of particulars" request from the 1971 Legislature that "The HECC is requested to continue to review the relationship between area vocational-technical schools and junior colleges in order to prevent unnecessary duplication of effort and programs."

Given the successful experience with program review during the initial stages of development, the Commission does not see need at this time for additional legislative action aimed at eliminating unwarranted duplication of programs in state junior colleges and area vocational-technical institutes. The Commission is convinced that the program review process can be improved and that effective attention can be directed to existing programs as well as proposals for new instructional programs as the process is developed more fully.

It should be noted that some excellent examples of cooperation between area vocational-technical institutes and junior colleges have emerged. These are discussed in another section of this report. It should also be noted that statewide meetings of state junior college presidents and area vocational-technical institute directors during the biennium indicate a willingness to engage in efforts to further improve the relationship between these two types of institutions. Such efforts are commendable and are to be encouraged.

It should also be noted, however, that cooperation between area vocational-technical institutes and junior colleges is not as extensive as desirable. The Commission proposes to undertake efforts during the next biennium in order to bring about a higher level of inter-institutional cooperation for coordination within each area of the state, as indicated in a preceding section of this report.

As a result of its intensive investigation into the relationship between junior colleges and area vocational-technical institutes, as requested by the 1969 Legisture, the Commission looked closely at those institutions involving maintenance of both a state junior college and an area vocational-technical institute in areas of relatively limited population and recommended that officials and boards responsible for the institutions in these situations enter into joint assessments of the feasibility and problems of merging the two institutions. In several of these situations, institutional enrollments are well below the desirable size for an institution of post-secondary education. In a previous section of this report, the Commission recognized the fact that making post-secondary education accessible to Minnesota residents in all areas of the state requires the maintenance of institutions which are much smaller than the minimum size recommended by the Carnegie Commission on Higher Education. It is the Commission's judgment that the advantages of making post-secondary education opportunity as accessible as feasible to all Minnesota residents outweigh the obvious advantages of achieving desired minimum size. The advantage of maintaining two small institutions to serve an area are less apparent.

The Commission will continue to urge that the officers and boards responsible for the junior colleges and area vocational-technical institutes which are located in close proximity in areas of limited population assess fully and seriously the feasibility and problems of merging the two institutions. The Commission offers to assist with such assessments to the fullest extent possible as such assessments may be requested by the parties concerned. In view of possible damage to educational programs which could result from merging institutions without full consideration of and preparation for the problems involved, the Commission is reluctant to recommend merger of area vocational-technical institutes and junior colleges located together in areas of relatively limited population. In view of the possible opportunity for strengthening institutions and achieving some economies, however, the Commission continues to believe that assessment of possible merger is desirable.

XVI. COORDINATING INSTRUCTIONAL PROGRAM OFFERINGS

The 1971 Legislature recognized the responsibilities of the Higher Education Coordinating Commission for coordination of the instructional efforts of public post-secondary institutions through a process of reviewing plans, proposals, and priorities for new and existing educational programs. Specifically, the Legislature charged the Commission with responsibility to:

> Review, make recommendations and identify priorities with respect to all plans and proposals for new or additional programs of instruction or substantial changes in existing programs to be established in or offered by, the University of Minnesota, the state colleges, the state junior colleges, and public area vocational-technical schools, and periodically review existing programs offered in or by the above institutions and recommend discontinuing or modifying any existing program, the continuation of which is judged by the commission as being unnnecessary or a needless duplication of existing programs.

A complete description of the program review process and a reporting of activities during the biennium appears in Appendix G.

While program review needs further development and continuing refinement, the process has had significant impact on planning and decision-making relating to the establishment of new instructional programs. In order to participate in program review, each institution must consider the implications of initiating a new instructional program in terms of total statewide needs and the efforts which other institutions may be making with similar existing programs. Moreover, plans and proposals for each new instructional program are scrutinized by representatives of all systems through the Curriculum Advisory Committee prior to final review of the proposal by the Commission. The Commission also receives an independent staff evaluation of each program along with relevant data.

The result of this process in that (1) institutions seeking to establish a new program must consider the way in which the proposal will be viewed by representatives of other systems and by the Commission, (2) institutions are made more fully aware of plans and programs of other institutions, and (3) the context for decision-making is expanded beyond institutional and system concerns to statewide concerns. The joint efforts of representatives from the several systems on the Curriculum Advisory Committee represent a new level of inter-institutional and inter-system cooperation in addressing state needs.

In order that decisions on new instructional programs might be based on a comprehensive view of post-secondary education, the Commission expanded program review by adopting guidelines which permit private colleges and universities to participate in the process along with public institutions. Three private college representatives were named to the Curriculum Advisory Committee along with the three representatives from each of the public systems. Participation of private colleges in program review throughout the current biennium has afforded the opportunity for considering the extent to which proposed programs in public institutions are duplicative of programs in private colleges and whether or not such duplication is desirable. In addition, the private college which participates in program review gains the benefit of having any proposed program scrutinized in terms of statewide needs and the efforts of public institutions.

While inclusion of private colleges in program review represented a significant step in making the process more comprehensive, the plans and programs of an additional component of post-secondary education (the private non-collegiate institutions) remained beyond the purview of program review. In order to correct this inadequacy and in recognition of the demonstrated interest of private non-collegiate institutions in program review, the Commission took action of November 10, 1972

to further expand program review to include plans and proposals for new instructional programs to be offered by private non-collegiate institutions. Accordingly, proposals from this additional component of post-secondary education are now invited and the Curriculum Advisory Committee has been expanded once again to include representatives of the private non-collegiate institutions.

Since complete effectiveness of program review depends on comprehensive assessments of post-secondary education, since the inclusion of the private sector of post-secondary education in planning is consistent with the Commission's general legislative charge, and since effective arrangements for including private collegiate and non-collegiate institutions in program review have been developed,

the Commission recommends that the 1973 Legislature extend the Commission's statutory responsibility for program review by amending Minnesota Statutes 136A.04 to include private collegiate and non-collegiate institutions of post-secondary education.

XVII. MEETING MANPOWER NEEDS IN MINNESOTA

As is the case with most social institutions, post-secondary education serves a variety of complex purposes. Some of these purposes relate to the needs of the state and society, while others are aimed at the needs of individual students. There is, and there will continue to be disagreement over the relative importance of the various purposes. Indeed, some would question the very validity of those goals which others would regard as being of the highest priority for post-secondary education.

Lack of agreement as to function and purpose is neither unique to post-secondary education nor is it necessarily a weakness. Choosing from among diverse and often conflicting purposes is a problem faced by most social institutions and to a considerable extent it is this process that keeps social institutions both strong and responsive to varied and changing needs in a free and open society.

The relative emphasis to be placed on the different purposes of post-secondary education is particularly relevant in regard to the consideration of manpower policy. In a technological society experiencing increasingly rapid change and during a period of declining enrollment, the temptation is to focus exclusively on those programs that are directed toward the fulfillment of specific manpower needs. The Commission recognizes, however, that the purposes of post-secondary education are broader than those related to manpower needs. Many of the manpower needs of tomorrow are not known today and, as a consequence, educational efforts must be concerned with the production of a citizenry that can adapt to changing circumstances. The Department of Labor, for example, projects that the average youth of today will probably shift occupations five times over the next forty years while in the labor market. Jobs which existed in large numbers a few decades ago no longer exist, and others which were nonexistent a few decade ago are prevalent today.

Nevertheless, manpower consideration in post-secondary educational planning cannot be ignored. An important function of post-secondary education is to produce the manpower needed for the functioning and improvement of society. Thus, the development and review of academic programs and the overall plan for the development of post-secondary education must occur within a context that is responsive to present and projected manpower needs.

The Commission is not suggesting that manpower needs are the only base for planning post-secondary education, nor that academic programs should be designed to meet specific job requirements. In a technological society, it is necessary that its members be able to adapt to rapid change. They require transferable skills and general knowledge that can be applied to a broad range of occupations. Thus, although manpower information is an important component of educational planning, it should not dominate the planning process.

Within this context, the coordination and planning of the production of educated manpower has been and continues to be an important function of the Commission. Beginning with *Proposal for Progress,*[1] the Commission outlined the factors affecting the production of manpower in Minnesota. Pointing to the increase of young people as a proportion of the total population and the labor force and pointing to the fact that those occupations that would provide the most opportunities for employment between 1960 and 1975 were the occupations that would require post-secondary education, the Commission recommended the initiation of the review of post-secondary education programs to improve the efficiency with which post-secondary education responded to the emerging manpower needs.[2]

[1]*Proposal for Progress: Guidelines for State Policy and Comprehensive Planning of Post-Secondary Education* (St. Paul: Minnesota Higher Education Coordinating Commission, January, 1969), pp. 58-66.

[2]*Ibid.*, pp. 68-72.

The Commission has subsequently implemented its program review responsibility and in the process has made extensive use of that manpower information it could generate. The program review process is on-going and routine. So far in the current biennium the Commission has acted on 200 programs reviewed in these reports. Staff evaluation of programs, contained in the Curriculum Advisory Committee-Staff reports to the Commission, include in the program descriptions the design capacity of each program and an estimate of per graduate cost. The need section of the evaluation compares the proposed program's capacity with the total statewide capacity as determined by these studies and other data that may be available. A further comparison is made with the occupational demand for this educated manpower. The several systems and institutions recognize these questions and are continually developing improved means of addressing them within their institutions, and between systems prior to having proposals submitted for review to the Higher Education Coordinating Commission.

In addition, the Commission has been involved in many other projects that have used or generated manpower information. In academic disciplines and occupational areas, the Commission has inaugurated or participated in efforts encompassing almost the entire range of human services occupations: social work, nursing, allied health, and elementary-secondary teaching. Another study attempted to apply the academic planning model to all programs and manpower needs in two planning regions of the state.

The study of social work programs, needs and occupations revealed new kinds of statewide information in a field that is altering direction and emphasis. The attendant coordination seminar is expected before the end of 1972. It will produce recommended policy directions for endorsement by the Commission and implementation by the institutions. The design of the seminars calls for participation by producers and consumers of educated manpower and by relevant agency representatives. These policy directions will also become specific criteria for continuing review of discrete programs in social work.

An advisory committee on nursing education has been established with the support of representatives from the total nursing community. After evaluating the three types of data collected by use of the planning model, this committee will also recommend policy directions related to the production of manpower for nursing.

The Commission staff participated in a study and Task Force on Allied Health under the auspices of Comprehensive Health Planning in the State Planning Agency. This study focused on information and planning processes and on existing programs and their output capacities in all institutions, including hosptials and proprietary schools. The study will be elaborated at the conclusion of Comprehensive Health Planning's current efforts to design an allied health manpower needs-projection model. The Task Force has proposed an allied health planning process and its work is to be reported to the Commission for joint endorsement.

Recognizing the impact of job demands on the teaching field, the Commission in February of 1972 requested reports from public institutions which prepare teachers for elementary and secondary schools. The staff prepared a study at the same time. Programs in teacher education have been altered because of the manpower market. Results of this effort have served as a basis for review of programs in this field.

Assessment of needs in southeastern and southcentral Minnesota undergirded the Commission's response to a legislative request for a new institution study affecting Rochester. Use of the academic planning model tested this kind of needs assessment as a part of the new institution planning process.

In summary, manpower considerations are essential to the planning and coordination process. In several ways the Commission provides for inclusion of manpower considerations either through its own endeavors or in collaboration with

key agencies and decision-makers. Manpower considerations are now integral to Commission processes, both routinely and in specific efforts. These processes include research and planning leading to statewide policy and decision-making and to the creation of coordination among the producers of educated manpower.

In spite of the experience and efforts of the Commission in applying manpower information to the identification of manpower needs in the state, it continues to be severely handicapped by the lack of manpower information. For the most part, the Commission has been forced to develop its own data for the specific problems being investigated. This same problem is generalizable to other agencies in the state with a planning responsibility. Thus, manpower data are being generated in different agencies to serve a variety of purposes, but no central source of manpower information exists. Fragmented manpower planning based on different data bases results in inefficient production of manpower information and relatively ineffective manpower planning.

In recognition of the inadequate manpower data available in the state and the fragmented manpower planning that occurs within the state, the Commission recommends that the 1973 Legislature address the need for coordination of existing manpower planning, for the development of statewide manpower policies, and for collecting and providing manpower data to state agencies that require such information in the execution of their planning responsibilities.

The Commission is actively involved in manpower planning as it executes its day to day responsibilities. Although it has gained considerable experience and made significant progress in addressing manpower needs, the Commission continues to suffer from the lack of well developed and general manpower information.

In the absence of positive action on the above recommendation, the Commission recommends that it be provided an appropriation of $100,000 to develop an on-going manpower data base that will enable it to improve its planning process.

XVIII. COORDINATING CONTINUING EDUCATION AND COMMUNITY SERVICE

The residents of Minnesota continue to expect that institutions of post-secondary education will apply their expertise and resources to meeting the needs for further education and to assisting in addressing the problems of the state and its communities. The varied programs in continuing education and community service throughout Minnesota have achieved successes in the past, but the challenges for the future are ever present.

Within recent years there have been changing notions of the definition of the "college-age" population to be served by post-secondary institutions and the result is a greatly expanded potential population with varying needs and expectations. Accompanying changes in the population have been recommendations from many quarters urging a broadening of post-secondary education options, a loosening of the lock-step approach to post-secondary education, the improved use of technology and other resources, and greatly increased inter-institutional efforts in all phases of post-secondary education.

There have been those in the past who have found it comfortable to view continuing education and community service as addenda, but the realities of the present dictate that these functions be reviewed as important elements of the overall range of post-secondary education activities and thus integral to the planning for this range of services.

Since 1966 the Higher Education Coordinating Commission has been actively involved in the coordination of the use of federal funds available for continuing education and community service programs. The Commission will continue its role in this area seeking to maximize both the availability and use of federal funds and providing active liaison with institutions, inter-institutional and regional groups working in continuing education and community service.

There will be increased attention and demands for activity within the many forms of further education in the coming years and important policy questions will need to be addressed as a result. In preparation for these policy discussions, the Commission proposes:

1. That HECC conduct a comprehensive statewide study of alternative academic programming (including correspondence, credit by exam, external degree) and alternative modes of program delivery (including mail, various electronic media, competency-based negotiation).
2. That the questions regarding the various funding processes for continuing education be studied within the context of a comprehensive examination of the financing of post-secondary education in Minnesota.
3. That HECC coordinate the review of the nature and effectiveness of past programs in community service and establish updated guidelines and priorities for future programs.

The reports of programs to date suggest that significant contributions are being made through community service programs. Experience with these programs has also demonstrated the presence of creative, imaginative, and socially sensitive faculty members who are willing to extend the resources of post-secondary education beyond campus boundaries.

In order to facilitate maximum effectiveness and economy of effort in meeting the state's needs for continuing education and community services, the Commission proposes to continue the work toward the development of a comprehensive, coordinated plan for further education and community service activities. To assist in the realization of these objectives,

the Commission recommends: An appropriation of $60,000 per year to assist in matching federal funds available for community service projects

and/or to provide a fund from which full state grants may be made for projects requiring funds in excess of federal funds available or projects which differ from federal funding guidelines. For the federal matching funds, the ratio of one-ninth institutional; two-ninths state; and six-ninths federal is recommended.

The appropriation of these funds would allow for the continuation of many of the types of programs currently active in Minnesota and would greatly enhance the opportunity for an increased number of institutions able to participate in community service projects as well as increase the variety of projects eligible for funding.

Finally, the Commission would recommend that in all aspects of continuing education and community service appropriate encouragement be accorded organized consortia and other inter-institutional efforts to meet the changing needs of regional and statewide clientele.

XIX. COORDINATING HEALTH EDUCATION PROGRAMS

In a special report to the 1971 Legislature, the Commission identified the need for coordinated development of health education of all types and at all levels of training in the state. (See Statement of Recommendations on Medical Education, Higher Education Coordinating Commission, March 1971.) The Commission has pursued this interest through many channels during the last biennium.

Cooperation efforts with the Comprehensive Health Planning Agency have been strengthened in two ways. The Commission staff, at the request of the Comprehensive Health Planning Agency, has collaborated in efforts to develop a comprehensive health manpower planning system, and the staff has established a formal relationship with the Comprehensive Health Planning Agency in the review of health-related educational programs.

Program review for health education programs in traditional institutions has proceeded in conjunction with the review of other academic programs. The Commission is presently moving to expand the program review process to include training programs offered in hospitals and other private non-collegiate institutions. (See Section XVI. Coordinating Instructional Program Offerings.)

In conjunction with a request from representatives of state professional nursing organizations, the Commission is conducting a statewide study of nursing education in order to develop policy guidelines for statewide planning for nursing education. The study is being conducted with the assistance of the Northland Regional Medical Program which has provided funding to the Commission to employ temporary staff to conduct the study. (Members of the Nursing Education Advisory Committee are listed in Appendix A.)

Based on the recommendation of the Commission the 1971 Legislature enacted legislation requesting the University Regents in collaboration with the Ramsey County Hospital Commission to develop and expand health education at the St. Paul-Ramsey Hospital and in the St. Paul area. This legislation provided an Advisory Committee to assist the University and directed the Commission to provide a secretarial and professional staff service.

The report of the Advisory Committee (see Appendix T) describes successful progress consistent with the legislative intent as well as the Commission's medical education report to the 1971 Legislature.

In view of the initial success of the experiment involving St. Paul-Ramsey Hospital, the Commission recommends that Hennepin County General Hospital be encouraged to develop parallel plans as recommended to the 1971 Legislature.

APPENDIX A

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Mankato State College

Soren Munkhof, Director
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Southwest Minnesota State College

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James C. Pehler
Assistant Coordinator
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St. Cloud State College

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St. Cloud Public Schools

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Special School District 916

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Vice President and Dean of Faculties
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Department of Education

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The following individuals also served on the Curriculum Advisory Committee during the past biennium:

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Mankato State College

Kenneth C. Bailey
Dean of the College
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Marla Batchelder
Assistant to the Vice Chancellor for Academic Affairs
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Bryce Crawford
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James L. Hausmann, Director
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Marland C. Nohre
Counselor
Alexandria Area Vocational-Technical Institute

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Jerry Clark
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Governor's Commission on Crime Prevention and Control

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Commissioner of Corrections

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Institute for Interdisciplinary Studies

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State College System

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APPENDIX B

HIGHER EDUCATION COORDINATING COMMISSION MAJOR REPORTS AND PUBLICATIONS DECEMBER 1972

MINNESOTA HIGHER EDUCATION COORDINATING COMMISSION MAJOR REPORTS AND PUBLICATIONS THROUGH DECEMBER, 1972

LEGISLATIVE REPORTS:

1. *Report of the Minnesota Liaison and Facilities Commission for Higher Education for the period July 1, 1965 — September 30, 1966, October 1966*
2. *Report of the Minnesota Higher Education Coordinating Commission, October 1968*
3. *Proposal for Progress: Guidelines for State Policy and Comprehensive Planning of Post-Secondary Education, January 1969*
4. *Meeting the Challenge: Recommendations for State Action in Meeting Minnesota's Needs for Post-Secondary Education, January 1971*
5. *Report of the Minnesota Inter-Institutional Television Program, January 1969*
6. *Information Relevant to Decisions on an Upper Division State College and a State Junior College in St. Paul, May 1970*
7. *Analyses and Conclusions Based on Information Relevant to Decisions on an Upper Division State College and a State Junior College in St. Paul, May 21, 1970*
8. *Recommendations of the Minnesota Higher Education Coordinating Commission on New Institutions, September 1, 1970*
9. *Statement of Recommendations on Medical Education, March 1971*
10. *An Inquiry into the Relationship Between Area Vocational-Technical Schools and Other Institutions of Higher Education in Minnesota, November 1970 (Planning Report 7)*
11. *Statewide Curriculum Study of Minnesota Higher Education, November 1970 (Planning Report 8)*

SPECIAL PROJECT AND GENERAL BACKGROUND REPORTS:

12. *A Philosophy for Minnesota Higher Education, March 1968 (Planning Report 1)*
13. *Meeting the Post-Secondary Educational Program and Facility Needs of the Urban Disadvantaged in the Twin Cities: Alternative Proposals, April 1971 (Planning Report 9)*
14. *An Introduction to Project Prime and Campus Minnesota. Project Prime Report, Number 2, November 1970*
15. *Program Costing with the Campus Simulation Model. Project Prime Report, Number 5, June 1971*
16. *Faculty Activity Analysis and Planning Models in Higher Education. Project Prime Report, Number 6, June 1971*
17. *A Faculty Activity Information Subsystem and Campus-Minnesota. Project Prime Report, Number 7, June 1971*
18. *An Operational Overview of the Campus Simulation Model. Project Prime Report, Number 8, June 1971*
19. *Minnesota Rankings Among the States: Comparative National and Midwest State Rankings, June 1972*
20. *Campus—Minnesota User Information Manual. Project Prime Report, Number 12, June 1971*
21. *Mid-Year Progress Report. Project Prime Report, Number 14, January 1971*
22. *Project Prime for Period July 1, 1970 - June 30, 1971. Final Report, Number 16, October 1971*
23. *Minnesota Post-Secondary Institutions: Institution Type, Student Body, Calendar System, Control/Affiliation, Location, and Year of Establishment, June 1971*
24. *Survey of Institutional Information for Minnesota Colleges and Universities, February 1969*
25. *Survey of Institutional Information for Minnesota Colleges and Universities, February 1970*
26. *Survey of Institutional Information for Minnesota Colleges and Universities, March 1971*

27. *Survey of Institutional Information for Minnesota Colleges and Universities, February 1972*

28. *Minnesota Population Trends, Commission Preliminary Post-Secondary Enrollment Projections and Commission Estimates of Enrollment Potentials in Existing, Authorized, and Recommended Institutions, December 1969*

29. *The Number of Resident Births Occurring in Minnesota Counties from 1950 through 1969 with Number and Percentage of Births in 1969 Differing from Years of Maximum Number of Births by County, August 1970*

30. *1970 Regional Profiles: Background Information for Post-Secondary Education in Each Planning Region; Regions One through Eleven, 1972*

31. *Minnesota Total Enrollment and Enrollment Projections: 1961 - 1971 and Projections to 1985, January 1972*

CONSULTANT REPORTS:

32. *Analysis and Recommendations Concerning the Expansion of Higher Education in Minnesota (Lewis B. Mayhew), April 1970*

33. *Computers and Information Systems in Higher Education, Part of Information Systems in the State of Minnesota 1970 - 1980 (Peter G. Roll, Peter C. Patton), September 1970*

34. *Minnesota Private Higher Education: An Assessment of the Present Status and Future Role of Private Higher Education in Minnesota (Earl J. McGrath, John D. Millet, Harry Ransom, Kenneth Thompson, and Robert Wert), December 1970*

STUDENT-RELATED REPORTS:

35. *Population and Student Enrollments in Minnesota Higher Education, September 1968 (Planning Report 2)*

36. *Student Enrollments in Minnesota Higher Education, 1967-68, October 1968 (Planning Report 3)*

37. *Fifteenth Annual Survey of Minnesota College and University Enrollments, Fall 1968, November 1968*

38. *Sixteenth Annual Survey of Minnesota College and University Enrollments, Fall 1969, November 1969*

39. *Seventeenth Annual Survey of Minnesota College and University Enrollments, Fall 1970, November 1970*

40. *Eighteenth Annual Survey of Minnesota College and University Enrollments, Fall 1971, November 1971*

41. *Nineteenth Annual Survey of Minnesota College and University Enrollments, Fall 1972, December 1972*

42. *Full-Time Equivalent Enrollment by Level in Minnesota Higher Education Institutions, Fall 1968, November 1968*

43. *Full-Time Equivalent Enrollment by Level in Minnesota Higher Education Institutions, Fall 1969, December 1969*

44. *Full-Time Equivalent Enrollment by Level in Minnesota Higher Education Institutions, Fall 1970, January 1971*

45. *Full-Time Equivalent Enrollment by Level in Minnesota Higher Education Institutions, Fall 1971, January 1972*

46. *Enrollments in Minnesota Public and Private Colleges and Universities, Winter 1969, February 1969*

47. *Enrollments in Minnesota Public and Private Colleges and Universities, Winter 1970, February 1970*

48. *Enrollments in Minnesota Public and Private Colleges and Universities, Winter 1971, March 1971*

49. *Enrollments in Minnesota Public and Private Colleges and Universities, Winter 1972, March 1972*

50. *Enrollment in Minnesota Colleges, Universities and Area Vocational-Technical Schools, Spring 1969, April 1969*

51. *Enrollment in Minnesota Colleges, Universities and Area Vocational-Technical Schools, Spring 1970, June 1970*

52. *Enrollment in Minnesota Colleges, Universities and Area Vocational-Technical Schools, Spring 1971, June 1971*

53. *Enrollment in Minnesota Colleges, Universities and Area Vocational-Technical Schools, Spring 1972, May 1972*

54. *Enrollments in Minnesota Public and Private Colleges and Universities, First and Second Summer Session 1969, August 1969*

55. *Enrollments in Minnesota Public and Private Colleges and Universities, First and Second Summer Session 1970, August 1970*

56. *Enrollments in Minnesota Public and Private Colleges and Universities, First and Second Summer Session 1971, August 1971*

57. *Enrollments in Minnesota Public and Private Colleges and Universities, First and Second Summer Session 1972, August 1972*

58. *Minnesota Total Enrollment and Enrollment Projections, April 1972*

59. *Full-Time New Entering Freshmen, Undergraduate Students, Graduate Students, Seminary Students, and Total Students in Minnesota Colleges and Universities, by County of Residence, Fall 1968, August 1969*

60. *Fall Total Headcount Enrollments with Annual and Percentage Changes, 1968-1972*

61. *An Analysis of F.T.E. Enrollments in Minnesota Post-Secondary Institutions with Annual and Percentage Changes, 1968-1972*

62. *Full-Time New Entering Freshmen, Undergraduate Students, Graduate Students, Seminary Students, and Total Students in Minnesota Colleges and Universities, by County of Residence, Fall 1969, June 1970*

63. *Full-Time New Entering Freshmen, Undergraduate Students, Graduate Students, Seminary Students, and Total Students in Minnesota Colleges and Universities, by County of Residence, Fall 1970, 1971*

64. *Full-Time New Entering Freshmen, Undergraduate Students, Graduate Students, Seminary Students, and Total Students in Minnesota Colleges and Universities, by County of Residence, Fall 1971, 1972*

65. *Students Enrolled for Advanced Degrees in Minnesota Colleges and Universities, Fall 1968, August 1969*

66. *Students Enrolled for Advanced Degrees in Minnesota Colleges and Universities, Fall 1969, August 1970*

67. *Students Enrolled for Advanced Degrees in Minnesota Colleges and Universities, Fall 1970, June 1971*

68. *Students Enrolled for Advanced Degrees in Minnesota Colleges and Universities, Fall 1971, January 1972*

69. *Minnesota Migration of College Students, Fall 1968, with Fall 1963 Comparisons, January 1972*

70. *Minnesota Colleges and Universities: Total Full-Time Enrollments by Sex, with Percentages, Fall 1956-1971, January 1972*

71. *Rates of College Attendance in Minnesota, March 1970*

72. *Act Class Profile of Minnesota Public College Entering Freshmen and Area Vocational-Technical School-Bound Students, 1969, May 1970*

73. *Act Class Profile of Minnesota College Entering Freshmen, 1970, September 1971*

74. *Statewide Survey of Post-High School Plans and Vocational Choices of Minnesota Juniors, May 1970*

75. *Analysis of Plans of Minnesota Junior College Sophomores, April 1970*

76. *Transfer Experiences of Post-Secondary Students to Minnesota Area Vocational-Technical Schools and State Junior Colleges, May 1970*

77. *MSAT Student Profile of Minnesota High School Junior Students, June 1970*

78. *MSAT Student Profile of Minnesota High School Junior Students, June 1971*

79. *Data Handbook for Minnesota Post-Secondary Enrollment Projections, February 1971*

80. *Minnesota Undergraduate Transfer Students, 1962-1970, November 1970*

81. *Home States of Full-Time and Part-Time Undergraduate and Graduate Students Enrolled in Minnesota Public Colleges and Universities, Fall 1968, September 1970*

82. *Rate of Completion of Students in Minnesota Higher Education Institutions, 1971*

83. *Number of Students Graduating from Minnesota Public and Parochial High Schools in 1969 and 1970 and Number and Percentage Entering Colleges and Universities as Freshmen in the Fall, 1969 and 1970*

84. *Number of Students Graduating from Minnesota Public and Parochial High Schools in 1970 and 1971 and Number and Percentage Entering Colleges and Universities as Freshmen in the Fall, 1970 and 1971, October 1972*

STAFF-RELATED REPORTS:

85. *Professional Personnel in Minnesota Higher Education, February 1969 (Planning Report 4)*

86. *Minnesota and National Faculty Median Salaries, 1964-1970, March 1971*

PROGRAM-RELATED REPORTS:

87. *Continuing Education in Minnesota: Extension, Continuing Education, and Community Services in Minnesota Post-Secondary Institutions, 1968-69, December 1970*

88. *Higher Education in the Solution of Community Problems in Minnesota, Title I*

89. *The Role of Continuing Education and Community Service in Minnesota in the Seventies: A Report to the Higher Education Coordinating Commission*

90. *Inventories of Minnesota Post-Secondary Instructional Programs, April 1972*

91. *Cooperative Efforts in Minnesota Two-Year Post-Secondary Occupational Programs, June 1970*

92. *A Description of Two-Year Post-Secondary Programs in the 12-State Midwestern Area, December 1969*

93. *Allied Health Education Programs in Minnesota, February 1970*

94. *Number of Baccalaureate, Master's, and Doctoral Degrees Granted by Minnesota Colleges and Universities from 1960-61 through 1969-70, May 1971*

95. *CAC—Staff Reports to the Commission on New and Existing Programs, Numbers 71-7 through 72-10/11, July 1971 - November 1972*

96. *Reports to Post-Secondary Systems on Commission Action in Program Review, Numbers 71-7 through 72-10/11, July 1971- November 1972*

97. *Minutes, Curriculum Advisory Committee (Twice monthly throughout the biennium)*

98. *Cameo Study Number 1: The Proposed Farm Operation Management Program (F-219) at Thief River Falls Area Vocational-Technical Institute, June 1971*

99. *Cameo Study Number 2: Some Planning Data Pertaining to an East Grand Forks Area Vocational Technical Institute, December 1971*

100. *Staff Brief: Report to the Commission on Educational Manpower, February 25, 1972*

101. *Development of a Statewide Plan for Nursing Education in Minnesota—A Proposal to the Northlands Regional Medical Program, July 1, 1972*

102. *Planning for Allied Health Personnel, Minneapolis: Institute for Interdisciplinary Studies, August 1972, Review Draft, (In cooperation with Minnesota Comprehensive Health Planning Agency)*

103. *The Coordination Outlook: Academic Planning —A Biennial Report to the Commission, October 1972*

104. *Preliminary Report of a Study of Inter-Institutional Cooperation in Minnesota Post-Secondary Education, November 1972*

105. *Report to the Vice President for Health Sciences, December 4, 1972, (In cooperation with the Advisory Committee on Medical Education Programs at St. Paul-Ramsey Hospital)*

FACILITIES-RELATED REPORTS:

106. *A Facilities Inventory and Space Utilization Survey for Minnesota Higher Education Institutions, July 1970 (Planning Report 6)*

107. *Analyses of Library Data for Minnesota Higher Education Institutions, 1966-69, September 1970*

108. *Federal Interest Grants Program Report, FPA, 1971-1973, Fall 1972*

109. *Federal Undergraduate Instructional Equipment Program Report, 1971-1973, Fall 1972*

110. *Federal Academic Facilities Program, 1971 - 1973, Fall 1972*

111. *Inter-Institutional Television Program Report, 1971 - Fall 1972, Fall 1972*

112. *Minnesota Inter-Institutional Instructional Television Program Directory, 1970-1972, Spring 1972*

113. *Minitex Report, Fall 1972*

FINANCE-RELATED REPORTS:

114. *Current Operating Revenues and Expenditures in Minnesota Higher Education, 1969-1970 Revision, November 1971 (Planning Report 5)*

115. *Current Operating Revenues and Expenditures of Minnesota Public and Private Higher Education, 1970-1971, August 1972*

116. *Minnesota Rankings Among the States According to State Appropriations for Higher Education, December 10, 1970*

117. *Tuition and Fees, 1971-1972, August 1971*

118. *Minnesota Higher Education Tuition and Fees: A Summary Analysis, March 1972*

119. *Faculty Compensation, Credit-Hour Production and Costs, 1969-1970, April 1971*

120. *Five-Year Summary of Higher Education Financing in Minnesota, 1966-67 through 1970-71, September 1972*

INFORMATIONAL BROCHURES:

121. *Guidelines for Program Review, December 1969*

122. *1973 Minnesota State Scholarship and Grant-In-Aid Programs: Information/Instructions*

APPENDIX C

ENROLLMENT REPORT

FALL TOTAL HEADCOUNT ENROLLMENT, 1967-1972, WITH ANNUAL PERCENTAGE CHANGE

INSTITUTION	1967	1968	CHANGE: N	CHANGE: %	1969	CHANGE: N	CHANGE: %	1970	CHANGE: N	CHANGE: %	1971	CHANGE: N	CHANGE: %	1972	CHANGE: N	CHANGE: %	1967-1972 CHANGE: N	1967-1972 CHANGE: %
AREA VOC. TECH. INSTITUTES																		
Albert Lea					30			145	115	383.3	232	87	60.0	299	67	28.9	299	
Alexandria	657	944	287	43.7	1,051	107	11.3	1,128	77	7.3	1,205	77	6.8	1,209	4	0.3	552	84.0
Anoka	38	372	334	178.9	1,020	648	174.2	1,157	137	13.4	1,650	493	42.6	1,647	–3	–0.2	1,609	42.3
Austin	327	355	28	8.6	323	–32	–9.0	327	4	1.2	378	51	15.6	466	88	23.3	139	42.5
Bemidji	136	136	0	0.0	155	19	14.0	151	–4	–2.6	191	40	26.5	266	75	39.3	130	95.6
Brainerd	153	263	110	71.9	270	7	2.7	335	65	24.1	492	157	46.9	552	60	12.2	399	260.8
Canby	231	256	25	10.8	270	14	5.5	358	88	32.6	330	–28	–7.8	380	50	15.1	149	64.5
Dakota County											170			347	177	104.1	347	
Detroit Lakes	229	210	–19	–8.3	280	70	33.3	387	107	38.2	467	80	20.7	515	48	10.3	286	124.9
Duluth	632	1,052	420	66.5	975	–77	–7.3	1,141	166	17.0	1,164	23	2.0	1,136	–28	–2.4	504	79.7
Eveleth	106	128	22	20.8	128	0	0.0	220	92	71.9	248	28	12.7	271	23	9.3	165	155.7
Faribault	222	241	19	8.6	252	11	4.6	262	10	4.0	265	3	1.1	327	62	23.4	105	47.3
Granite Falls	187	219	32	17.1	333	114	52.1	230	–103	–30.9	257	27	11.7	288	31	12.1	101	54.0
Hibbing	166	214	48	28.9	241	27	12.6	272	31	12.9	230	–42	–15.4	283	53	23.0	117	70.5
Hutchinson								471			246	–225	–47.8	295	49	19.9	295	
Jackson	362	391	29	8.0	415	24	6.1	481	66	15.9	426	–55	–11.4	454	28	6.6	92	25.4
Mankato	236	571	335	141.9	848	277	48.5	977	129	15.2	974	–3	–0.3	1,066	92	9.4	830	351.7
Minneapolis	762	956	194	25.5	885	–71	–7.4	867	–18	–2.0	1,063	196	22.6	813	–250	–23.5	51	6.7
Moorhead	244	348	104	42.6	490	142	40.8	656	166	33.9	731	75	11.4	876	145	19.8	632	259.0
Pine City	134	139	5	3.7	139	0	0.0	120	–19	–13.7	195	75	62.5	159	–36	–18.5	25	18.7
Pipestone	191	240	49	25.7	276	36	15.0	376	100	36.2	396	20	5.3	468	72	18.2	277	145.0
Ramsey-Washington County											105			700	595	566.6	700	
Red Wing											31			45	14	45.2	45	
Rochester	112	50	–62	–55.4	173	123	246.0	423	250	144.5	533	110	26.0	615	82	15.4	503	449.1
St. Cloud	444	600	156	35.1	746	146	24.3	956	210	28.2	1,006	50	5.2	1,186	180	17.9	742	167.1
St. Paul	1,458	1,586	128	8.8	1,692	106	6.7	1,946	254	15.0	2,039	93	4.8	2,150	111	5.4	692	47.5
Staples	355	398	43	12.1	440	42	10.6	461	21	4.8	468	7	1.5	483	15	3.2	128	36.1
Suburban Hennepin County											82			1,059	977		1,059	
Thief River Falls	280	363	83	29.6	415	52	14.3	423	8	1.9	422	–1	–0.2	445	23	5.5	165	58.9
Wadena	216	251	35	16.2	328	77	30.7	291	–37	–11.3	401	110	37.8	397	–4	–1.0	181	83.8
Willmar	554	675	121	21.8	680	5	0.7	807	127	18.7	1,003	196	24.3	1,146	143	14.2	592	106.9
Winona	316	443	127	40.2	580	137	30.9	601	21	3.6	957	356	59.2	596	361	37.7	280	88.6
TOTAL	8,748	11,401	2,653	30.3	13,435	2,034	17.8	15,969	2,534	18.9	18,357	2,388	15.0	20,939	2,582	14.1	12,191	139.4

FALL TOTAL HEADCOUNT ENROLLMENT, 1967-1972, WITH ANNUAL PERCENTAGE CHANGE — Continued

INSTITUTION	1967	1968	CHANGE: N	CHANGE: %	1969	CHANGE: N	CHANGE: %	1970	CHANGE: N	CHANGE: %	1971	CHANGE: N	CHANGE: %	1972	CHANGE: N	CHANGE: %	1967-1972 CHANGE: N	1967-1972 CHANGE: %
STATE JUNIOR COLLEGES																		
Anoka-Ramsey	1,373	1,853	+480	35.0	2,127	274	14.8	2,360	233	11.0	2,298	−62	−2.6	2,160	−138	−6.0	787	57.3
Austin	973	975	2	0.2	932	−43	−4.4	975	43	4.6	1,058	83	8.5	927	−131	−12.4	−46	−6.7
Brainerd	472	494	22	4.7	535	41	8.3	640	105	19.6	622	−18	−2.8	565	−57	−9.2	93	19.7
Fergus Falls	539	572	33	6.1	602	30	5.2	601	−1	−0.2	650	49	8.2	590	−60	−9.2	51	9.5
Hibbing	748	819	71	9.5	811	−8	−1.0	781	−30	−3.7	772	−9	−1.2	671	−101	−13.1	−77	−10.3
Inver Hills								435			979	544	125.1	1,313	334	34.7	1,313	
Itasca	562	590	28	5.0	610	20	3.4	599	−11	−1.8	563	−36	−6.0	512	−51	−9.1	−50	−8.9
Lakewood	575	1,201	626	108.9	1,093	−108	−9.0	1,599	506	46.3	2,222	623	39.0	2,097	−125	−5.6	1,522	264.7
Mesabi	716	758	42	5.9	783	25	3.3	781	−2	−0.3	771	−10	−1.3	706	−65	−8.4	−10	−1.4
Metropolitan	941	1,019	78	8.3	1,154	135	13.3	1,434	280	24.3	1,786	352	2.5	2,254	468	26.2	1,313	139.5
Normandale		1,386			2,531	1,145	82.6	2,862	331	13.1	3,180	318	11.1	3,380	200	6.3	3,380	
North Hennepin	1,093	1,417	324	29.6	1,753	336	23.7	2,012	259	14.8	2,314	302	15.0	2,478	164	7.1	1,385	126.7
Northland	299	338	39	13.0	379	41	12.1	370	−9	−2.4	396	26	7.0	385	−11	−2.8	86	28.8
Rainy River	190	288	98	51.6	369	81	28.1	324	−45	−12.2	363	39	12.0	272	−91	−25.1	82	43.2
Rochester	2,039	2,032	−7	−0.3	2,140	108	5.3	2,320	180	8.4	2,302	−18	−0.8	2,327	25	1.1	288	14.1
Vermilion	269	268	−1	−0.4	258	−10	−3.7	302	44	17.1	396	94	31.1	340	−56	−14.1	71	26.4
Willmar	654	697	43	6.6	770	73	10.5	788	18	2.3	732	−56	−7.1	694	−38	−5.2	40	6.1
Worthington	647	654	7	1.1	697	43	6.6	766	69	9.9	678	−88	−11.5	618	−60	−8.8	−29	4.5
TOTAL	12,090	15,361	3,271	27.1	17,544	2,183	14.2	19,949	2,405	13.7	22,082	2,133	10.7	22,289	207	0.9	10,199	84.4
STATE COLLEGES																		
Bemidji	4,163	4,463	300	7.2	4,716	253	5.7	4,780	64	1.4	4,839	59	1.2	4,570	−269	−5.6	407	9.8
Mankato	10,290	11,643	1,353	13.1	12,090	447	3.8	12,363	273	2.3	12,109	−254	−2.1	10,923	−1,186	−9.8	633	6.2
Metropolitan														304	304		304	
Moorhead	4,055	5,033	978	24.1	5,235	202	4.0	5,310	75	1.4	5,160	−150	−2.8	4,781	−379	−7.3	726	17.9
St. Cloud	8,147	9,065	918	11.3	9,557	492	5.4	10,131	574	6.0	9,965	−166	−1.6	9,179	−786	−7.9	1,032	12.7
Southwest	509	1,398	889	174.7	2,206	808	57.8	3,136	930	42.2	2,985	−151	−4.8	2,548	−437	−14.6	2,039	400.6
Winona	3,302	3,704	402	12.2	3,877	173	4.7	4,026	149	3.8	3,988	−38	−0.9	3,888	−100	−2.5	586	17.7
TOTAL	30,466	35,306	4,840	15.9	37,681	2,375	6.7	39,746	2,065	5.5	39,046	−700	−1.8	36,193	−2,853	−7.3	5,727	18.8
UNIVERSITY OF MINNESOTA																		
Mpls./St. Paul	39,754	40,899	1,145	2.8	42,884	1,985	4.9	43,545	661	1.5	43,562	17	0.0	41,698	−1,864	−4.3	1,944	4.9
Duluth	4,919	5,000	81	1.6	5,580	580	11.6	5,586	−12	−0.2	5,346	−222	−4.0	5,488	142	2.7	569	11.6
Morris	1,107	1,264	157	14.2	1,510	246	19.7	1,716	206	13.6	1,709	−7	−4.0	1,763	54	3.2	656	59.3
U. Tech. Coll., Crookston	310	371	61	19.7	441	70	18.9	418	−23	−5.2	513	95	22.7	660	147	28.7	350	112.9
U. Tech. Coll., Waseca											115			320	205	178.3	320	
TOTAL	46,090	47,534	1,444	3.1	50,415	2,881	6.1	51,247	832	1.7	51,245	−2	0.0	49,929	−1,316	−2.6	3,839	8.3

FALL TOTAL HEADCOUNT ENROLLMENT, 1967-1972, WITH ANNUAL PERCENTAGE CHANGE -- Continued

INSTITUTION	1967	1968	CHANGE: N	CHANGE: %	1969	CHANGE: N	CHANGE: %	1970	CHANGE: N	CHANGE: %	1971	CHANGE: N	CHANGE: %	1972	CHANGE: N	CHANGE: %	1967-1972 CHANGE: N	1967-1972 CHANGE: %
PRIVATE JUNIOR COLLEGES																		
Bethany Lutheran	228	243	15	6.6	204	-39	-16.0	207	3	1.5	214	7	9.5	215	1	0.5	-13	-5.7
Corbett	65	72	7	10.8	65	-7	-9.7	58	-7	-10.8							-65	
Crosier Seminary	73	63	-10	-13.7	55	-8	-12.7	37	-18	-32.7	29	-8	-21.6	38	9	31.0	-35	-47.5
Golden Valley Lutheran	227	239	12	5.3	240	1	0.4	260	20	8.3	363	103	39.6	411	48	13.2	184	81.1
St. Mary's	545	528	-17	-3.1	575	47	8.9	643	68	11.8	707	64	10.0	781	74	10.5	236	43.3
TOTAL	1,138	1,145	7	0.6	1,139	-6	-0.5	1,205	66	5.8	1,313	108	9.0	1,445	132	10.1	307	26.9
PRIVATE FOUR-YEAR COLLEGES																		
Augsburg	1,754	1,841	87	5.0	1,786	-55	-3.0	1,697	-89	-5.0	1,616	-81	-4.8	1,638	22	1.4	-116	-7.9
Bethel	1,027	1,211	184	17.9	1,259	48	4.0	1,104	-155	-12.3	1,044	-60	-5.4	1,139	95	9.1	112	10.9
Carleton	1,376	1,482	106	7.7	1,450	-32	2.2	1,521	71	5.0	1,498	-23	-1.5	1,553	55	3.7	177	12.9
Concordia (Moorhead)	2,335	2,340	5	0.2	2,405	65	2.8	2,360	-45	-1.9	2,402	+42	1.8	2,439	37	1.5	104	4.5
Concordia (St. Paul)	739	742	3	0.4	800	58	7.8	810	10	1.3	713	-97	-12.0	677	-36	-5.0	-62	-8.4
Dr. Martin Luther	592	609	17	2.9	628	19	3.1	800	172	27.4	732	-68	-8.5	676	-56	-7.7	84	14.2
Gustavus Adolphus	1,782	1,835	53	3.0	1,883	48	2.6	1,907	24	1.3	1,918	11	0.6	1,941	23	1.2	159	8.9
Hamline	1,244	1,227	-17	-1.4	1,272	45	3.7	1,249	-23	-1.8	1,274	25	2.0	1,341	67	5.3	97	7.8
Lea	616	733	117	19.0	909	176	24.0	668	-241	-26.5	367	-301	-45.1	108	-259	-70.6	-508	-82.5
Macalester	1,821	1,971	150	8.2	1,979	8	0.4	2,093	114	5.8	2,097	4	0.2	2,012	-85	-4.1	191	10.5
Mpls. Coll. of Art & Design	380	383	3	0.8	437	54	14.1	474	37	8.5	475	1	0.2	466	-9	-1.9	86	22.6
Minnesota Bible	132	121	-11	-9.1	107	-14	-11.6	104	-3	-2.8	99	-5	-4.8	95	-4	-4.0	-37	-18.0
North Central Bible	409	445	36	8.8	481	36	8.1	466	-15	-3.1	475	9	1.9	461	-14	-2.9	52	12.7
Pillsbury														422			422	
St. Benedict	573	620	47	8.2	625	5	0.8	736	111	17.8	927	191	26.0	1,104	177	19.1	531	92.7
St. Catherine	1,384	1,300	-84	-6.1	1,299	-1	0.0	1,339	40	3.1	1,344	5	0.4	1,459	115	8.6	75	5.4
St. John's	1,476	1,521	45	3.0	1,538	17	1.1	1,581	43	2.8	1,604	23	1.5	1,724	120	7.5	248	16.8
St. Mary's	1,090	1,117	27	2.5	1,043	-74	-6.6	990	-53	-5.1	1,052	62	6.3	1,152	100	9.5	62	5.7
St. Olaf	2,535	2,563	27	1.1	2,593	30	1.2	2,674	81	3.1	2,650	-24	-0.9	2,748	98	3.7	212	8.4
St. Paul Bible	405	362	-43	-10.6	399	37	10.2	415	16	4.0	409	-6	-1.5	407	-2	-0.5	2	0.5
St. Scholastica	583	522	-61	-10.5	645	123	23.6	824	179	27.6	915	91	11.0	959	44	4.8	376	64.5
St. Teresa	1,341	1,311	-30	-2.2	1,188	-123	-9.4	1,046	-142	-12.0	987	-59	-5.6	1,030	43	4.4	-311	-23.2
St. Thomas	2,230	2,344	114	5.1	2,411	67	2.9	2,430	19	0.8	2,488	58	2.4	2,456	-32	-1.3	226	10.1
TOTAL	25,825	26,600	775	3.0	27,137	537	2.0	27,288	151	0.6	27,086	-202	-0.7	28,007	921	3.4	2,182	8.4

FALL TOTAL HEADCOUNT ENROLLMENT, 1967-1972, WITH ANNUAL PERCENTAGE CHANGE — Continued

INSTITUTION	1967	1968	CHANGE: N	CHANGE: %	1969	CHANGE: N	CHANGE: %	1970	CHANGE: N	CHANGE: %	1971	CHANGE: N	CHANGE: %	1972	CHANGE: N	CHANGE: %	1967-1972 CHANGE: N	1967-1972 CHANGE: %
PRIVATE PROF. SCHOOLS																		
Bethel Seminary								240			229	−11	−4.6	217	−12	−5.2	217	
Luther Theol. Sem.	529	565	36	6.8	480	−85	−15.0	435	−45	−9.4	422	−13	−3.0	418	−4	−0.9	−111	−21.0
N.W. Luth. Theol. Sem..	144	130	−14	−9.7	165	35	26.9	167	2	1.2	183	16	+9.6	172	−9	−6.0	28	19.4
St. Paul Seminary.....	229	133	−96	−41.9	147	14	10.5	126	−21	−14.3	107	−19	−15.1	110	3	2.8	−119	−48.0
United Theol. Sem.....	72	122	50	69.4	124	2	1.6	137	13	10.5	139	2	1.5	122	−17	−12.2	50	69.4
William Mitchell	374	347	−27	−7.2	368	21	6.1	491	123	33.4	560	69	14.1	664	104	18.6	290	77.5
TOTAL	1,348	1,297	−51	−3.8	1,284	−13	−1.0	1,596	312	24.3	1,640	44	2.8	1,703	63	3.8	355	26.3
TOTAL AVTI's	8,748	11,401	2,653	30.3	13,435	2,034	17.8	15,969	2,534	18.9	18,357	2,388	15.0	20,939	2,582	14.1		
TOTAL 4-YEAR COLLEGES*	102,071	109,069	6,998	6.9	114,792	5,723	5.2	117,863	3,071	2.7	116,749	−1,114	−0.9	113,149	−3,600	−3.1	11,078	10.9
TOTAL PROF. SCHOOLS	1,348	1,297	−51	−3.8	1,284	−13	−1.0	1,596	312	24.3	1,640	44	2.8	1,703	63	3.8	355	26.3
TOTAL 2-YEAR COLLEGES	13,538	16,877	3,339	24.7	19,124	2,247	13.3	21,572	2,448	12.8	24,023	2,451	11.4	24,714	691	2.9	11,176	82.6
TOTAL PRIVATE INST.	28,311	29,042	731	2.6	29,560	518	1.8	30,089	529	1.8	30,039	−50	−0.2	31,155	1,116	3.7		
TOTAL PUBLIC INST.	97,394	109,602	12,208	12.5	119,075	9,473	8.6	126,911	7,836	6.6	130,730	3,819	3.0	129,350	−1,380	−1.1		
GRAND TOTAL..	125,705	138,644	12,939	10.3	148,635	9,991	7.2	157,000	8,365	5.6	160,769	3,769	2.4	160,505	−264	−0.2		

*U.M. Crookston and Waseca included in 2-year college count only.

APPENDIX D

NEED FOR STUDENT AID FUNDS

AN ESTIMATE OF THE NEED FOR NON-FAMILY FINANCIAL SUPPORT OF MINNESOTA RESIDENTS IN POST-SECONDARY EDUCATIONAL INSTITUTIONS IN MINNESOTA

Empirical evidence suggests great differences in the ability of Minnesota families to buy post-secondary education for their children. But no definitive "yardstick" exists which can accurately measure the amount of non-family financial support needed to attain equal educational opportunity for our young men and women. When non-family resources are inadequate to provide fair and reasonable access to post-secondary education, extreme and unequal sacrifices are made by students and their families in striving for an educational objective.

This treatise is an attempt to derive from available data a reasonable estimate of such need for financial assistance through an analysis of (a) current enrollments in systems of post-secondary education, (b) the distribution of family income of students within systems, (c) a family's ability to pay toward educational expenses from a given income and (d) current price tags on post-secondary education by system.

TABLE I. FULL-TIME UNDERGRADUATE STUDENTS ENROLLED IN MINNESOTA POST-SECONDARY INSTITUTIONS, FALL TERM 1971

	Full-Time Undergraduates		Minnesota Residents			
			Total		Entering Freshmen	
Post-Secondary Group	N_1	%	N_2	$N_2/N_1 = \%$	N_3	$N_3/N_2 = \%$
Private 2-year	1,195	100	982	82.2	455	46.3
Private 4-year	25,577	100	14,848	58.1	4,276	28.8
University of Minnesota	35,926	100	34,141	95.0	7,904	23.2
State 4-year	32,900	100	29,668	90.2	6,657	22.4
State 2-year	16,345	100	15,638	95.7	7,825	50.0
AVTI	17,608	100	17,094	97.1	11,396	66.7
Hospital Schools	1,450	100	1,375	94.8	687	50.0
	131,001		113,746		39,200	

Source: *The Counties of Residence Studies of Full-Time Undergraduate Students and Full-Time Entering Freshmen Enrolled in Minnesota Institutions of Post-Secondary Education, Fall 1971.* (St. Paul: Minnesota Higher Education Coordinating Commission, 1972).

TABLE II. PERCENTAGE DISTRIBUTION OF FAMILIES BY INCOME LEVEL

Family Income	Minnesota Families[2]	Families with Students in Minnesota Post-Secondary Educational Institutions[1]							
		Private College 2-Year	Private College 4-Year	U. of Minn.	State College 2-Year	State College 4-Year	AVTI	Hosp. Schools	All Schools
Under 3,000	9.0	4.9	4.7	5.1	5.8	10.1	22.0	5.7	9.1
$ 3,000 - 5,999	14.9	9.3	9.1	9.8	15.5	16.7	22.9	15.6	14.2
6,000 - 7,499	8.9	7.5	6.5	6.9	16.8	14.8	17.3	16.9	11.8
7,500 - 8,999	10.5	9.2	8.3	7.7	15.9	13.2	13.4	15.9	11.2
9,000 - 11,999	21.4	18.5	18.8	24.4	23.6	19.5	14.3	23.5	20.3
12,000 - 14,999	22.1	31.7	32.8	29.4	15.3	16.1	6.8	15.3	21.3
15,000 and Over	13.2	18.9	19.8	16.7	7.1	9.6	3.3	7.1	12.1
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median Income	$9,939	$12,010	$12,245	$11,520	$8,623	$8,455	$6,442	$8,613	$9,547

[1]Based on Tripartite Applications to HEW for Federal Student Aid Funds Filed by Participating Institutions in Minnesota.
[2]*Fourth Count.* (Washington, D.C.: U.S. Bureau of the Census, 1970).

TABLE III. EXPECTED PARENTS' CONTRIBUTION TOWARD EDUCATIONAL EXPENSES FROM NET INCOME BEFORE TAXES

Family Income	Group Median	Number of Dependent Children — One in Post-Secondary Education					
		1	2	3	4	5	6
Under 3,000	$ 2,000	$ –0–	$ –0–	$ –0–	$ –0–	$ –0–	$ –0–
$ 3,000 - 5,999	5,000	–0–	–0–	–0–	–0–	–0–	–0–
6,000 - 7,499	7,000	550	280	80	–0–	–0–	–0–
7,500 - 8,999	8,250	890	560	330	170	90	20
9,000 - 11,999	10,500	1,410	1,070	760	570	480	390
12,000 - 14,999	13,250	2,180	1,710	1,320	1,050	940	830
15,000 and Over	20,000	4,890	4,210	3,520	2,960	2,670	2,410

Source: *Manual for Financial Aid Officers: 1971 Revision*—Table A. (New York: College Scholarship Service; College Entrance Examination Board, 1971.)

TABLE IV. WEIGHTED AVERAGE COST BUDGETS OF MINNESOTA POST-SECONDARY INSTITUTIONS

Group	Weighted Average Cost†	% Distribution of Commuters and Residents	
		Commuters	Residents
Private 2-Year	$2,805	*	*
Private 4-Year	3,340	*	*
University of Minnesota	2,110	60	40
State 2-Year	1,490	90	10
State 4-Year	1,800	25	75
AVTI	1,190	60	40
Hospital Schools	1,900	20	80

*Distribution of commuting and resident students in each college considered in deriving Weighted Average Cost.

†Budget includes: Tuition and mandatory fees. Books and supplies at $150 per year. Room and board at dormitory double room rate. Personal: clothing, laundry, dry cleaning, personal hygiene, transportation, health insurance, and a reasonable allowance for recreation activity.

TABLE V. EXPENDITURES FOR POST-SECONDARY EDUCATION BY MINNESOTA RESIDENTS IN MINNESOTA EDUCATIONAL INSTITUTIONS

Group	All Minnesota Residents				Entering Freshmen Only			
	N	% Distribution	W.A.C.	Expenditure	N	% Distribution	W.A.C.	Expenditure
Private 2-Year	982	0.9	$2,805	$ 2,754,510	455	1.1	$2,805	$ 1,276,275
Private 4-Year	14,848	13.1	3,340	49,592,320	4,276	10.9	3,340	14,281,840
University of Minnesota	34,141	30.0	2,110	72,037,510	7,904	20.2	2,110	16,677,440
State 2-Year	15,638	13.7	1,490	23,300,620	7,825	20.0	1,490	11,659,250
State 4-Year	29,668	26.1	1,800	53,402,400	6,657	17.0	1,800	11,982,600
AVTI	17,094	15.0	1,190	20,341,860	11,396	29.1	1,190	13,561,240
Hospital Schools	1,375	1.2	1,900	2,612,500	687	1.7	1,900	1,305,300
	113,746	100.0		$224,041,720	39,200	100.0		$ 70,743,945

Given the above data, certain assumptions must be made regarding the parameters of various distributions. It is reasonable to assume that family income distribution for entering freshmen is the same as that for all Minnesota residents attending Minnesota post-secondary educational institutions. For each level of income, families are distributed by size. Each additional child after the first increases basic maintenance costs

but at a decreasing rate. The greater the number of children, given a level of income, the less parents can be expected to contribute to the costs of post-secondary education for each of their children. In making this analysis, it is assumed that the size of the family is normally distributed over the income range and that a family with three children, one of whom is in post-secondary education, is most representative of all families seeking financial aid for their children.

Historical data provides the basis for this analysis. To derive an estimate of the need for non-family financial support of entering freshmen in post-secondary educational institutions for the near future years, it is assumed that current patterns of attendance with some modifications resulting from the availability of financial aid will most accurately assist in obtaining an estimate of the need for non-family financial support for those expected to enter post-secondary education.

With the data given and the assumptions made, the computation of the estimated amount of non-family financial support required for those Minnesota residents entering Minnesota institutions of post-secondary education directly from secondary schools follows.

TABLE VI. PRIVATE JUNIOR COLLEGES

					Student Enrollment by Income Group							
					All Minnesota Residents				Entering Freshmen			
Family Income	Group Median Income	Expected Family Resources[1]	Weighted Average Cost	Estimated Median Need	% in G	N in G	Cumulative %	Estimated Need	% in G	N in G	Cumulative %	Estimated Need
Under 3,000	$ 2,000	$ 360	$2,805	$2,445	4.9	48	4.9	$ 117,360	4.9	22	4.9	$ 53,790
$ 3,000- 5,999	5,000	360	2,805	2,445	9.3	91	14.2	222,495	9.3	42	14.2	102,690
6,000- 7,499	7,000	440	2,805	2,365	7.5	74	21.7	175,010	7.5	35	21.7	82,775
7,500- 8,999	8,250	690	2,805	2,115	9.2	90	30.9	190,350	9.2	41	30.9	86,715
9,000-11,999	10,500	1,120	2,805	1,685	18.5	182	49.4	306,670	18.5	84	49.4	141,540
12,000-14,999	13,250	1,680	2,805	1,125	31.7	311	81.1	349,875	31.7	145	81.1	163,125
15,000 and over	20,000	3,805	2,805	–0–	18.9	186	100.0	–0–	18.9	86	100.0	–0–
Totals					100.0	982		$1,361,760	100.0	455		$ 630,635

[1]Includes median summer savings of $360

TABLE VII. PRIVATE FOUR-YEAR COLLEGES

Family Income	Group Median Income	Expected Family Resources[1]	Weighted Average Cost	Estimated Median Need	Student Enrollment by Income Group: All Minnesota Residents % in G	N in G	Cumulative %	Estimated Need	Entering Freshmen % in G	N in G	% Cumulative	Estimated Need
Under $ 3,000	$ 2,000	$ 360	$3,340	$2,980	4.7	698	4.7	$ 2,080,040	4.7	201	4.7	$ 598,980
$ 3,000- 5,999	5,000	360	3,340	2,980	9.1	1,351	13.8	4,025,980	9.1	389	13.8	1,159,220
6,000- 7,499	7,000	440	3,340	2,900	6.5	965	20.3	2,798,500	6.5	278	20.3	806,200
7,500- 8,999	8,250	690	3,340	2,650	8.3	1,232	28.6	3,264,800	8.3	355	28.6	940,750
9,000-11,999	10,500	1,120	3,340	2,220	18.8	2,791	47.4	6,196,020	18.8	804	47.4	1,784,880
12,000-14,999	13,250	1,680	3,340	1,660	32.8	4,870	80.2	8,084,200	32.8	1,402	80.2	2,327,320
15,000 and over	20,000	3,880	3,340	–0–	19.8	2,941	100.0	–0–	19.8	847	100.0	–0–
Totals					100.0	14,848		$26,449,540	100.0	4,276		$ 7,617,350

TABLE VIII. UNIVERSITY OF MINNESOTA — ALL CAMPUSES

Family Income	Group Median Income	Expected Family Resources[1]	Weighted Average Cost	Estimated Median Need	Student Enrollment by Income Group: All Minnesota Residents % in G	N in G	Cumulative %	Estimated Need	Entering Freshmen % in G	N in G	Cumulative %	Estimated Need
Under $ 3,000	$ 2,000	$ 360	$2,110	$1,750	5.1	1,741	5.1	$ 3,046,750	5.1	403	5.1	$ 705,250
$ 3,000- 5,999	5,000	360	2,110	1,750	9.8	3,346	14.9	5,855,500	9.8	775	14.9	1,356,250
6,000- 7,499	7,000	440	2,110	1,670	6.9	2,356	21.8	3,934,520	6.9	545	21.8	910,150
7,500- 8,999	8,250	690	2,110	1,420	7.7	2,629	29.5	3,733,180	7.7	609	29.5	864,780
9,000-11,999	10,500	1,120	2,110	990	24.4	8,330	53.9	8,246,700	24.4	1,929	53.9	1,909,710
12,000-14,999	13,250	1,680	2,110	430	29.4	10,037	83.3	4,315,910	29.4	2,324	83.3	999,320
15,000 and over	20,000	3,880	2,110	–0–	16.7	5,702	100.0	–0–	16.7	1,319	100.0	–0–
Totals					100.0	34,141		$29,132,560	100.0	7,904		$ 6,745,460

TABLE IX. STATE TWO-YEAR COLLEGES

Family Income	Group Median Income	Expected Family Resources[1]	Weighted Average Cost	Estimated Median Need	Student Enrollment by Income Group: All Minnesota Residents % in G	All Minnesota Residents N in G	All Minnesota Residents Cumulative %	All Minnesota Residents Estimated Need	Entering Freshmen % in G	Entering Freshmen N in G	Entering Freshmen Cumulative %	Entering Freshmen Estimated Need
Under $ 3,000	$ 2,000	$ 360	$1,490	$1,130	5.8	907	5.8	$ 1,024,910	5.8	454	5.8	$ 513,020
$ 3,000- 5,999	5,000	360	1,490	1,130	15.5	2,424	21.3	2,739,120	15.5	1,213	21.3	1,370,690
6,000- 7,499	7,000	440	1,490	1,050	16.8	2,627	38.1	2,758,350	16.8	1,315	38.1	1,380,750
7,500- 8,999	8,250	690	1,490	800	15.9	2,486	54.0	1,988,800	15.9	1,244	54.0	995,200
9,000-11,999	10,500	1,120	1,490	370	23.6	3,691	77.6	1,365,670	23.6	1,847	77.6	683,390
12,000-14,999	13,250	1,680	1,490	–0–	15.3	2,393	92.9	–0–	15.3	1,197	92.9	–0–
15,000 and over	20,000	3,880	1,490	–0–	7.1	1,110	100.0	–0–	7.1	555	100.0	–0–
Totals					100.0	15,638		$ 9,876,850	100.0	7,825		$ 4,943,050

TABLE X. STATE FOUR-YEAR COLLEGES

Family Income	Group Median Income	Expected Family Resources[1]	Weighted Average Cost	Estimated Median Need	Student Enrollment by Income Group: All Minnesota Residents % in G	All Minnesota Residents N in G	All Minnesota Residents Cumulative %	All Minnesota Residents Estimated Need	Entering Freshmen % in G	Entering Freshmen N in G	Entering Freshmen Cumulative %	Entering Freshmen Estimated Need
Under $ 3,000	$ 2,000	$ 360	$1,800	$1,440	10.1	2,996	10.1	$ 4,314,240	10.1	672	10.1	$ 967,680
$ 3,000- 5,999	5,000	360	1,800	1,440	16.7	4,955	26.8	7,135,200	16.7	1,112	26.8	1,601,280
6,000- 7,499	7,000	440	1,800	1,360	14.8	4,391	41.6	5,971,760	14.8	985	41.6	1,339,600
7,500- 8,999	8,250	690	1,800	1,110	13.2	3,916	54.8	4,346,760	13.2	879	54.8	975,690
9,000-11,999	10,500	1,120	1,800	680	19.5	5,785	74.3	3,933,800	19.5	1,298	74.3	882,640
12,000-14,999	13,250	1,680	1,800	120	16.1	4,777	90.4	573,240	16.1	1,072	90.4	128,640
15,000 and over	20,000	3,880	1,800	–0–	9.6	2,848	100.0	–0–	9.6	639	100.0	–0–
Totals					100.0	29,668		$26,275,000	100.0	6,657		$ 5,895,530

TABLE XI. AREA VOCATIONAL TECHNICAL INSTITUTES

Family Income	Group Median Income	Expected Family Resources[1]	Weighted Average Cost	Estimated Median Need	Student Enrollment by Income Group: All Minnesota Residents % in G	N in G	Cumulative %	Estimated Need	Entering Freshmen % in G	N in G	Cumulative %	Estimated Need
Under $ 3,000	$ 2,000	$ 360	$1,190	$ 830	22.0	3,761	22.0	$ 3,121,630	22.0	2,507	22.0	$ 2,080,810
$ 3,000- 5,999	5,000	360	1,190	830	22.9	3,915	44.9	3,249,450	22.9	2,610	44.9	2,166,300
6,000- 7,499	7,000	440	1,190	750	17.3	2,957	62.2	2,217,750	17.3	1,971	62.2	1,478,250
7,500- 8,999	8,250	690	1,190	500	13.4	2,291	75.6	1,145,500	13.4	1,527	75.6	763,500
9,000-11,999	10,500	1,120	1,190	70	14.3	2,444	89.9	171,080	14.3	1,630	89.9	114,100
12,000-14,999	13,250	1,680	1,190	–0–	6.8	1,162	96.7	–0–	6.8	775	96.7	–0–
15,000 and over	20,000	3,880	1,190	–0–	3.3	564	100.0	–0–	3.3	376	100.0	–0–
Totals					100.0	17,094		$ 9,905,410	100.0	11,396		$ 6,602,960

TABLE XII. HOSPITAL SCHOOLS

Family Income	Group Median Income	Expected Family Resources[1]	Weighted Average Cost	Estimated Median Need	Student Enrollment by Income Group: All Minnesota Residents % in G	N in G	Cumulative %	Estimated Need	Entering Freshmen % in G	N in G	Cumulative %	Estimated Need
Under $ 3,000	$ 2,000	$ 360	$1,900	$1,540	5.7	78	5.7	$ 120,120	5.7	39	5.7	$ 60,060
$ 3,000- 5,999	5,000	360	1,900	1,540	15.6	215	21.3	331,100	15.6	107	21.3	164,780
6,000- 7,499	7,000	440	1,900	1,460	16.9	232	38.2	338,720	16.9	116	38.2	169,360
7,500- 8,999	8,250	690	1,900	1,210	15.9	219	54.1	264,990	15.9	109	54.1	131,890
9,000-11,999	10,500	1,120	1,900	780	23.5	323	77.6	251,940	23.5	162	77.6	126,360
12,000-14,999	13,250	1,680	1,900	220	15.3	210	92.9	46,200	15.3	105	92.9	23,100
15,000 and over	20,000	3,880	1,900	–0–	7.1	98	100.0	–0–	7.1	49	100.0	–0–
Totals					100.0	1,375		$ 1,353,070	100.0	687		$ 675,550

TABLE XIII. SUMMARY OF ESTIMATED NEED FOR NON-FAMILY FINANCIAL SUPPORT OF MINNESOTA RESIDENTS IN POST-SECONDARY EDUCATIONAL INSTITUTIONS IN MINNESOTA

Table	Group	All Minnesota Residents				Entering Freshmen			
		E	%	Need	%	E	%	Need	%
VI	Private 2-Year	982	0.9	$ 1,361,760	1.3	455	1.1	$ 630,635	1.9
VII	Private 4-Year	14,848	13.1	26,449,540	25.3	4,276	10.9	7,617,350	23.0
VIII	University of Minnesota	34,141	30.0	29,132,560	27.9	7,904	20.2	6,745,460	20.4
IX	State 2-Year	15,638	13.7	9,876,850	9.5	7,825	20.0	4,943,050	14.9
X	State 4-Year	29,668	26.1	26,275,000	25.2	6,657	17.0	5,895,530	17.8
XI	AVTI	17,094	15.0	9,905,410	9.5	11,396	29.1	6,602,960	19.9
XII	Hospital Schools	1,375	1.2	1,353,070	1.3	687	1.7	675,550	2.1
	Totals	113,746	100.0	$104,354,190	100.0	39,200	100.0	$33,110,535	100.0
	Ratio of Need to Total Expenditures			46.6%				46.8%	

TABLE XIV. SUMMARY OF NON-FAMILY RESOURCES AVAILABLE TO MEET EDUCATIONAL COSTS WHICH THE FAMILY UNIT CANNOT PROVIDE

Resources Available from:	All Minnesota Residents	Entering Freshmen
Federal Programs (NDSL, EOG, CWSP, Nursing)	14,205,513[1]	4,896,571[1]
Institutional Funds	12,375,249[2]	4,265,687[2]
Federally Insured Student Loans	25,000,000[3]	6,952,500[4]
State Aids (Nursing Scholarships, State Scholarships/Grants-in-Aid, Indian Scholarships/Federal, State, Tribal)	5,450,000	3,196,015
TOTAL	$ 57,030,762	$19,310,773
Total Need	$104,354,190	$33,110,535
– Resources Available	57,030,762	19,310,773
= Net Unmet Need	$ 47,323,428[5]	$13,799,762[5]

[1]Pro-rata portion of federal funds for Minnesota residents.

[2]Pro-rata portion of institutional funds for Minnesota residents. Includes estimate from 14 non-reporting collegiate institutions ($3,369,050). Does not include institutional employment which is not used as student aid. Estimate $13,000.00.

[3]Estimated portion used by Minnesota residents within the state (Total $30,000.00).

[4]Estimated portion used by freshman students.

[5]Portion of this being met by non-institutional part-time employment and non-need institutional employment.

APPENDIX E

NEED FOR STUDENT LOANS

SURVEY OF FEDERALLY INSURED STUDENT LOAN PROGRAM IN MINNESOTA

This survey was undertaken at the request of the Minnesota Higher Education Coordinating Commission to determine the adequacy of the existing federally insured student loan (FISL) program in meeting the current and future borrowing needs of students in the state. If the FISL program proved to be currently or potentially inadequate, shortcomings were to be identified and new methods of meeting the students' needs were to be proposed.

This report summarizes the findings of the survey of 20 financial aid officers representing schools within a 150-mile radius of the Twin Cities, four telephone interviews with financial aid officers in out-of-state schools, and eight representative bank loan officials in the Twin Cities and several college towns.* The literature on guaranteed loans was reviewed and federal information pertaining to the national and Minnesota student loan situation was analyzed. A list of suggested readings is shown in Exhibit 1.

A — SUMMARY OF FINDINGS

Interviews with financial aid officers and bank officials revealed that the overwhelming majority of students currently enrolled have been able to find federally insured student loans (FISL) at participating banks.

Although the aid officers indicated that the supply of loan money under the existing National Direct Student Loan (NDSL) and Health Professions programs was inadequate, they stated that the FISL program appeared to meet the remaining needs. They estimated the number of students who experience difficulty in obtaining loans at less than 5 per cent and the number who are actually unable to secure loans at between 1 and 2 per cent. The difference presumably reflects those students who ultimately found a bank willing to grant a loan, who secured the needed funds from some nonloan source such as parents or part-time work, or who reduced their expenditures.

Within the 5 per cent whom the financial aid officers estimated as "having difficulty," certain specific patterns and characteristics were identified, which would cause a student to be denied a loan by one or more lending institutions. These patterns are generally consequences of bank policies established to minimize loan defaults. They are discussed in the following sections with a description of how a particular student is affected.

*Throughout this report, the term "bank" will be used to refer to all lending institutions—savings banks, commercial banks, savings and loan associations, etc.

Freshmen

Many banks have a formal policy of denying loans to entering freshmen. This policy could deny a loan to a student for the entire first year or, in some banks, merely the first quarter. Since entering freshmen have the highest attrition rate and students who drop out have a significantly higher default rate than those who graduate, freshmen are undesirable loan candidates. However, this prohibition was not universal and since several banks served freshmen, most first-year students could eventually obtain loans.

In a typical case, a student was referred to a large Twin Cities bank for a FISL loan by his home town bank, which did not participate in the program. The student completed the applications and was led to believe that because he was recommended by his banker his loan would be approved. Ten days before registration he was notified that his loan was denied because the bank's policies prohibited loans to freshmen. If he could finance the first quarter on his own, the bank would then furnish him with a loan for the balance of the year.

Lack of Banking Ties

Almost all banks surveyed indicated that they give preference to their customers. Next priority is given to local residents whose regular bank does not participate in the FISL program. Next, are nonresidents, with the recommendation of their nonparticipating hometown bank. Students who have no bank references or bank contacts through their families are thus the least desirable loan candidates. In addition, lending officers have found that students with no permanent local residence are difficult to pursue for collections. However, those students refused for loans in the area of their school could normally obtain approval in their home area, but students with no banking ties and no permanent residence have great difficulty because they are viewed as potentially uncollectible risks.

In one case, a college graduate from Florida joined the army and after his discharge decided to continue his education in Minnesota. When, immediately after returning from Viet Nam, he applied for a FISL loan to supplement his veteran's benefits, he had no banking references, had not established a residence and could not even give recent United States personal references. He was denied the loan. Fortunately, his financial aid officer was able to arrange financing through a special foundation and the student enrolled.

Heavy Debtors

Both bank officials and financial aid officers indicated that they believed that a student graduating with a debt

in excess of $5,000 or $6,000 was in serious financial condition and both cited the growing number of student bankruptcies as evidence of the difficulty of this situation. (The statistical evidence suggests that bankruptcy is responsible for only 4 per cent of current defaults; this attitude may simply reflect a traditional aversion to the accumulation of substantial debt.) As a result, the graduate student, the young married student whose spouse is unable to work or the college senior who has been counseled unwisely may find himself $4,500 in debt and no one willing to loan him $1,500 so he can complete the year, graduate and repay the loans. It should be noted, however, that a student rarely blunders into this situation without warning; in most cases, he is counseled as a freshman about the bank's policy on the maximum permissible debt. In any event, banks will usually assist a student until he graduates, if for no other reason than the greater likelihood of collecting a $6,000 debt from a graduate than a $4,500 debt from a dropout. Our interviews suggest that the heavy debtor most apt to have difficulty securing a guaranteed student loan is the married undergraduate student; the financial aid officers stated that graduate students and upper classmen did not appear to have difficulty in obtaining loans.

A typical high debt student might come from an economically depressed family, with the parents unable to contribute to his support or education. Even if he is able to get some scholarship or grant funding, he still finds he must take large loans to continue in school, especially if he is married. By his third or fourth year in school, he has difficulty finding a loan and it becomes impossible to pursue a graduate degree immediately, if it is not funded in large part from nonloan sources.

* * * * *

Some statistical confirmation of these findings is shown in Exhibit 2. Last year, freshmen across the nation received 45 per cent of the loans granted and 46 per cent of the dollars loaned under federal guarantees, but in Minnesota freshmen received 31 per cent of the loans and 31 per cent of the dollars loaned. The cumulative figures for previous years show a similar pattern.

EXHIBIT 1

DISTRIBUTION OF LOANS IN MINNESOTA AND THE UNITED STATES BY ACADEMIC LEVEL

Academic Year	Fiscal Year 1971-72 Minnesota	1971-72 U.S.	Cumulative Previous Years Minnesota	Cumulative Previous Years U.S.
	A — Per Cent of Loans			
Zero	1%	1%	3%	2%
First	31	45	31	38
Second	23	15	23	19
Third	19	15	21	18
Fourth/Fifth	19	14	16	14
Graduate	7	10	7	10
Total	100%	100%	100%	100%
	B — Per Cent of Loan Amounts			
Zero	1%	1%	3%	2%
First	31	46	31	40
Second	22	14	23	17
Third	19	15	20	17
Fourth/Fifth	19	13	15	13
Graduate	8	11	8	11
Total	100%	100%	100%	100%

Source: Department of Health, Education, and Welfare data.

B — MAGNITUDE OF UNMET NEEDS

Before attempting to design alternative solutions to meet the patterns of loan denial which were found, it is necessary to estimate how many students are affected. There are two factors to be determined — the range of students who have difficulty finding loans, and the number of students actually unable to obtain loans. Estimates were made in two ways, but each case involved use of the financial aid officers' calculation that 5 per cent of the students they saw had some difficulty and up to 2 per cent may have been ultimately unable to secure a loan.

First, enrollment data by academic level was obtained from the Minnesota Higher Education Coordinating Commission and projected for the next two years, as shown in Exhibit 3. Next, the data available from government sources on past and projected loan volumes in Minnesota and the nation were reviewed and compiled (Exhibits 4 and 5). Then, the number of students experiencing loan problems was estimated using two bases, as shown in Exhibit 6.

The two base groups from which the projections were developed were:

— Base I: the current and projected number of actual FISL borrowers in Minnesota from data supplied by the U.S. Office of Education

— Base II: the total current and projected enrollments of Minnesota students in the three potential problem categories — freshmen, married students and graduate and professional students.

The range of unmet needs is summarized below:

	Number of Students	
Year	Base I	Base II
A — Experiencing Difficulty		
1973	1,650	3,850
1974	1,700	3,965
1975	1,750	4,084
B — Not Obtaining Loan		
1973	660	1,540
1974	672	1,586
1975	686	1,634

EXHIBIT 2

COMPARISON OF TOTAL ENROLLMENTS IN MINNESOTA INSTITUTIONS OF POST-SECONDARY EDUCATION BY ACADEMIC LEVEL

Actual Fall 1970 and 1971,
Estimated Fall 1972 and 1973

	Actual[a]			Estimated[b]	
Academic Level	1970	1971	Per Cent Increase or (Decrease) 1971 over 1970	1972	1973
Freshman	47,006	46,185	(1.75)%	45,000	45,000
Sophomore	33,244	34,418	3.5	33,000	33,000
Junior	20,023	19,630	(2.0)	20,000	19,500
Senior	20,577	21,457	4.3	21,000	21,500
First Professional..	3,557	3,749	5.4	4,000	3,500
Graduate	12,583	12,237	(2.7)	13,000	13,000
Other (colleges and universities) ...	4,041	4,736	17.2	5,500	6,000
Extension	19,450	15,821	(18.7)	14,000	13,500
Area Vocational Technical Institute	15,969	18,743	17.4	20,000	21,000
Private Trade School	4,629	6,400	38.3	7,500	8,500

[a]Minnesota Higher Education Coordinating Commission data.
[b]Cresap, McCormick and Paget Inc. estimates.

EXHIBIT 3

NUMBER AND TOTAL AMOUNT OF FEDERALLY SPONSORED STUDENT

Fiscal Years 1969 Through 1973(a)

Fiscal Year	Type of Loan Program	
	NDSL	FISL
	A — Number of Loans	
1969	14,057	23,587
1970	17,845(b)	26,814
1971	19,027(b)	27,680
1972	20,074(b)	31,911
1973(b)	14,878	33,000
	B — Total Amount of Loans	
1969	$4,623,000	$29,349,934
1970	4,549,000	26,246,240
1971	5,432,000	28,774,362
1972	6,630,000(c)	33,888,634
1973	6,545,000(c)	39,000,000

(a) Limited data available from the Department of Health, Education, and Welfare at the time of this study.

(b) Estimated.

(c) Estimated federal capital contribution, assuming average loan of $625 in 1972 and $675 in 1973.

EXHIBIT 4

NUMBER AND TOTAL AMOUNT OF FEDERALLY SPONSORED STUDENT LOANS IN THE UNITED STATES

Fiscal Years 1969 Through 1973[a]

Year	Type of Loan Program					
	NDSL	FISL	Health Professions	Nursing Students	Other[b]	All Programs
			A — Number of Loans			
1969	455,998	787,344	25,445	25,055	6,357	1,300,199
1970	455,800	921,896	22,874	18,300	18,375	1,436,245
1971	560,400	1,080,739	24,000	24,443	20,883	1,710,455
1972	641,600	1,256,299	—	30,000	—	—
1973[c]	—	1,500,000	—	30,000	—	—
			B — Total Amount of Loans (000)			
1969	$246,300	$ 687,000	$26,429	$16,608	$ 4,902	$ 980,639
1970	286,900	340,000	15,900	12,281	13,906	1,168,177
1971	364,247	1,044,000	24,756	17,110	18,484	1,468,597
1972	291,637	1,301,576	—	21,000[d]	—	—
1973[d]	270,000	1,500,000	27,500	21,000[d]	—	—

[a]Limited data available from the Department of Health, Education, and Welfare at the time of this study.

[b]Includes loan programs for Cuban students and law enforcement education.

[c]Estimated.

[d]Estimated assuming $700 per loan.

EXHIBIT 5

ESTIMATED NUMBER OF MINNESOTA STUDENTS EXPERIENCING DIFFICULTY IN OBTAINING FISL LOANS

Base	Year 1973	1974	1975
Base I[a]			
Number of FISL loans to Minnesota students	33,000[b]	33,660	34,332
Number of students with serious problems — 5%	1,650	1,700	1,750
Number of Students Unable To Obtain Loans — 2%	660	672	686
Base II[c]			
Number of:			
Freshmen	45,000[d]	46,350	47,740
Married students	15,000[e]	15,450	15,910
Graduate 1 professional students	17,000[d]	17,510	18,035
Potential Total With Problems	77,000	79,310	81,685
Number of Students with Serious Problem — 25%	3,850	3,965	4,084
Number Unable To Obtain Loans — 2%	1,540	1,586	1,634

Note: In all bases, the numbers of FISL loans, freshmen, married students and graduate/professional students were estimated to increase at 3 per cent per year.

[a]Base I — all Minnesota students who received FISL loans.

[b]From Exhibit 4.

[c]Base II — all Minnesota freshmen, and married, graduate and professional students.

[d]From Exhibit 3.

[e]Estimated by Cresap, McCormick and Paget Inc. from limited Department of Health, Education, and Welfare data.

Base I, the current and projected FISL volume, provides lower estimates of current needs, but assumes only a modest growth in student reliance on the FISL system. Base II is larger, including all freshmen, married students, and graduate/professional students, and suggests the magnitude of need if most of the students in the state should turn to federally guaranteed loans to meet some part of the costs of their higher education.

If "need" is assumed to be no more than 2 per cent of the total current FISL lending, the number of students not served by the present system would be only 660. Three factors, however, indicate that the number of un- or under-served students may be considerably larger. First, it is felt that students should not have to search excessively for a FISL loan. Those who ultimately secure a loan after "difficulty" may secure a smaller amount than is wise or desirable given the current costs of attending college. Many colleges assume a "self-help" component in meeting these total costs and, while there is a danger of excessive debts or excessively "easy" credit, it does not seem appropriate for students to be forced to expend great time and energy securing credit which has become an accepted means of financing higher education. In short, "having difficulty" does reflect a degree of "unmet need," even if a loan is ultimately secured.

Second, borrowing has increased rapidly over the past few years and, by any criterion, unmet need is likely to increase as well. The number of FISL loans in Minnesota rose 35 per cent from 1969 to 1972, and the uncertainty of other federal loan and aid programs suggests that FISL will continue to be the fastest-growing component of federal assistance.

Finally, throughout the interviews, the extremely negative views of financial aid officers and bankers

toward the whole concept of student borrowing became apparent — in spite of an estimate of nearly $2 billion in student lending nationally this year. Not surprisingly, financial aid officers, as well as students, would prefer to see a great expansion of direct federal grants or the federally subsidized National Direct Student Loan program. Part of their case for this expansion lies in resisting the current trend toward a greater reliance on unsubsidized federally guaranteed loans. Thus, the estimates of both "difficulties" and "denials" may very well be biased downward by a negative attitude toward student borrowing in general — an attitude which may have more basis in the financial aid officers' conception of the kinds of financing they wish were available than in a realistic assessment of how students may have to finance higher education in the future.

Therefore, the somewhat higher figure of 1,500 has been established as representing an "unmet need," which reflects at least some of those who may ultimately find a loan "with difficulty," as well as a modest upward correction to take into consideration those students whose borrowing difficulties may never have come to the attention of the financial aid officers at their schools. *Even with such a higher estimate, however, it must be concluded that there is no substantial unmet need in the Minnesota FISL program, nor is there any perceived need on the part of financial aid officers for a major loan program to supplement the current bank-financed FISL lending programs.*

C — ALTERNATIVE COURSES OF ACTION

This section outlines alternative approaches to meeting the loan needs of Minnesota students, and analyzes their advantages and disadvantages.

Alternatives

Three courses now seem open to the state of Minnesota with respect to student loan programs:

— Take no action

— Induce the banking community to meet the need

— Develop and implement a state program.

Take No Action

This approach would be chosen if the state believes that the problem identified is so small that it does not warrant affirmative action. The advantages of this course are that there is no interference with the present system, which appears to be functioning adequately at this time, and that it requires no investment of resources by the state. The disadvantage is obvious: whatever problems now exist will continue, and no base is established for meeting future borrowing needs, which may be a great deal larger.

Induce The Banking Community To Meet The Need

It is conceivable that banks and other commercial credit outlets participating in the FISL program could be induced to drop or amend their various restrictions against lending to freshmen, noncustomers, etc. The advantages of this course of action would be a complete or nearly complete solution to problems, with minimal cost and formal involvement by the state. The disadvantage of this course is the absence of any practical strategy to induce several hundred commercial lenders to take actions which they have indicated they believe are contrary to their economic interests.

Develop And Implement A State Program

Under this course of action, the state would provide loans to students whose needs are not now being met, either directly or through an intermediary. The advantage of this course is that all students would be assured of receiving a needed loan. The disadvantage is that the state would have to develop, establish and fund a new state operation to dispense the estimated volume of loans each year.

Analysis of Alternatives

Since the second course of action can be eliminated from consideration rapidly, it should be discussed first. During the analysis phase of this study, this approach was explored and several methods of inducing banks to make the required loans were identified. Oral persuasion (frequently called jawboning) was discarded as ineffective, especially with such a large, widely dispersed group. Interest subsidy to the lending institutions which would accept special risk cases was rejected on administrative grounds; it would be impossible to select the 1,500 cases (or 3,000 for that matter) in advance and, furthermore, if banks were paid extra to accept applications they had refused, they might tend to refuse a greater number. Any form of legislation compelling the banks to accept such cases was rejected as possibly illegal and probably politically impractical. Therefore, it was determined that the second course of action must be discarded.

Next, the advantages and disadvantages of a state program, compared with taking no action, were determined. The advantages of such a program are fivefold:

— It would be a convenience for students experiencing difficulty in obtaining loans.

— It would provide a loan to the student who otherwise could not receive one and, therefore, might be unable to attend school; it would be helping the student who needs it most.

— It would provide the state with a framework in which to expand to a general loan program if the present FISL program — which depends on the voluntary support of independent bankers — should become inadequate in the future.

— It would give the state a new degree of flexibility to deal with the question of tuition and pos-

sible future increases in tuition in the four public systems of post-secondary education.

— It would provide a base for implementation of total assistance packaging by the financial aid officers of Minnesota institutions, including grants, job aid, and loans, all awarded and disbursed directly by the financial aid officers.

To appreciate the third advantage, it is necessary to see under what conditions the present FISL program has performed adequately and to study the assumptions on which continued adequate performance is based:

— All other grant, scholarship and loan programs must continue to be funded at comparable levels.

— Conditions in the money markets must remain relatively easy; at any rate, the tight money and high interest rates of 1969 must not return.

— The participating banks must not lose interest in the program and withdraw.

— The number of students requiring aid must not increase sharply and strain the available funds.

— The average loan size must not increase sharply and strain available funds.

Should any of these assumptions prove untrue, the present FISL program would become inadequate. A specific example would be the withdrawal of Midwest Federal of Minneapolis from the program. The 5,000 loans and $7.5 million in loan funds granted by this bank in 1971 could not easily be absorbed by the remaining banks.

The fourth advantage—greater flexibility in setting new state tuition policies—becomes particularly germane if the state is considering major increases in tuition at any level within any of the publicly supported systems of post-secondary education (area vocational technical institutes, junior colleges, state colleges, and the University). Although the public sector nationally has experienced relatively high percentage increases in tuition over the past five years, it still remains heavily subsidized, especially at the upper division, graduate and professional levels. Given increasing enrollments and the increasing per student costs of instruction, as well as the multitude of other pressing demands on the state budget dollar, it is safe to assume that tuitions will continue to rise, quite possibly at an accelerated rate at certain (for example, graduate or professional) levels. If tuition increases are to remain a viable option for higher educational policy-makers in the state of Minnesota, it is imperative that state-sponsored, need-based assistance programs be devised to ensure that no student is denied a higher education because of inability to meet higher costs. While a greatly expanded student grant program would most likely constitute the core of such assistance, loans would also undoubtedly play a major role. The existence of a supplementary state-sponsored loan plan, then, could serve as one part of a comprehensive student assistance plan designed to maintain access to higher education in the face of the need to increase some tuition rates.

A final argument in favor of a state loan plan, on a limited supplementary basis, is that it would allow a more meaningful exploration of the feasibility and desirability of originating the loan component of a student's total assistance package within the financial aid office of his or her college, rather than separating that portion of need which is satisfied directly by the financial aid offices (grants, NDSL loans, work-study, etc). and that portion of total need which the student is expected to secure on his own through his neighborhood bank or some other source. With the new FISL regulations to take effect in March of 1973, virtually all FISL's will require a statement of need from the financial aid officer. As the concepts of "self-help" and "total assistance packages" (that is, grants, loans and job aid) become more institutionalized, a case can be made, especially at the higher-cost private institutions, for the ability of the financial aid officer to actually *grant* the FISL which he may already have entered in his calculation of need and assistance. While the origination of FISL loans is not likely to pass entirely into the hands of financial aid officers in the near future, if ever, a state program which could sponsor large-scale FISL lending at a few institutions could test the feasibility of the concept. Thus, a pilot program directly designed to cover statewide "unmet needs" could also serve as a test for placing a greater portion of FISL origination in the hands of the financial aid officers. (Origination does not require servicing or collecting; it is envisioned that any expanded institutionally originated FISL program be serviced either by a state agency or, in the immediate future at least, by a bank or private loan servicing agency.)

The disadvantages to establishing a state program are as follows:

— The state would have to capitalize the program, presumably through bonded indebtedness.

— It apparently would be serving a rather small (1,500 per year) clientele.

— It would put the state in a position to compete with the banks for some student loans; this could cause some banks to leave the program, which could conceivably aggravate the problem.

— The financial aid officers at the schools surveyed were cool toward any additional loan program.

— It would be "another program" at the state level on top of the present federal FISL program.

— A state program might have to continue to service its loan customers; the program could expand extremely quickly under certain policy decisions.

SELECTION OF AN ALTERNATIVE

On the basis of the advantages and disadvantages outlined above, the selection of a preferred course of action can be reduced to an evaluation of what the future course of any program, if implemented, might be. If a program were designed solely to meet the needs of the 1,500 students who cannot obtain loans each year, it would not be desirable. Such a supplemental loan program would be quite costly, in time, effort and money, for what it might accomplish. Furthermore, the hard-core cases of loan denial are not currently perceived as a major barrier to educational opportunity in the state.

If, however, a program was initiated as a hedge against possible future inadequacies of bank-originated FISL lending and/or as an exploration of the potential of institutionally originated FISL lending, a pilot program would indeed appear to be worthwhile, provided it could be run on a break-even basis. Therefore, it is recommended that the state of Minnesota explore a pilot program to satisfy current unmet loan needs, to protect its students in the event of the collapse of the present FISL program, and to test some new concepts in loan aid delivery systems. This recommendation is based much less on the existence of a current problem than on the potential for future problems as a result of expanded borrowing needs, and on the merits of providing a test of expanded FISL lending originated by the financial aid officers.

D — PILOT PROGRAM OPTIONS

During the analysis phase of this study, several alternative formats were identified for the recommended state pilot program. They were analyzed and the best three were costed out and are described here.

OPTION 1

Under this option, each financial aid officer would act as the direct agent of a state loan agency which would, in turn, be certified as an eligible lender by the office of Education under the FISL program. The financial aid officers would act under guidelines established to focus these FISL loans on the students not being served by normal commercial institutions. The state would have to pass enabling legislation and furnish a full range of loan services or contract for them. A bond issue would have to be floated to provide the necessary capital. The extent to which the state's agents would compete with the banks in providing FISL loans could be controlled through lending guidelines.

For costing purposes, this option was subdivided into an Option I-A and Option I-B. Under I-A, borrowers would be encouraged to try the commercial banking system before using the state program. This would tend to minimize the program's size. Under Option I-B, once a student had a loan from the state program, he would be allowed to obtain all further loans directly and immediately from the state program. This would tend to encourage rapid growth of the program. Under I-A, the student would have to arrange for consolidation of his loans at graduation; under I-B, this would not be necessary.

OPTION II

Under this option, each student awarded a grant-in-aid would be offered an FISL loan directly by the state issuing agency. The state would have to pass enabling legislation, float a bond issue each year to raise capital, and provide for the full range of loan processing services. The state agency would probably eliminate bank lending to this small group of students.

* * *

It should be noted that neither option considers the problem of the student who has a loan at two or more banks, but has not been able to consolidate them. While the state could act as a consolidation broker, this activity has been excluded to avoid obscuring the fundamental character of the options. No estimates of this type of activity could be made on the basis of the data developed for this study, but brokerage should be analyzed as part of the implementation of any future system.

COSTS OF OPTIONS

The costs of each option were projected after certain assumptions were made about volumes, average loan sizes and operating expenses. The costs of the options are summarized in the following table:

Item	Option I-A	Option I-B	Option II
Development Costs	$120,000	$120,000	$60,000
Maximum Cumulative Outlay.....	329,835(a)	298,280(b)	93,885(c)
Time Required to Recover all Development and Operating Expenses	12-13 years	8-9 years	5-years

(a) In the fifth year.
(b) In the fourth year.
(c) In the second year.

Option 1

Option I, either version A or B, would permit financial aid officers to make loans to individual students who are unable to obtain bank loans. It is specifically designed to focus on unmet needs.

Should the present FISL program collapse, the financial aid officers could be given expanded lines of credit (or guidelines) to aid all students requiring FISL loans. Although the increase in volume would cause processing problems, the procedures would be quite similar in an expanded system.

Finally, the financial aid officer would have an opportunity to test the concept of direct institutional award of FISL loans. Certain schools could be chosen as test sites and the financial aid officers permitted to provide FISL loans to all of his students. The state could then assess the concept on the basis of a cross-section of students and financial aid officers.

Option I-A would keep the program small and perhaps more manageable, but would require heavier capital inputs. In addition, students would be required to make their own consolidation arrangements, and it is not clear that it is reasonable to expect most students to understand and arrange for a consolidation. For these reasons, Option I-B, even with the risks of an expanding list of lenders and volume of loans, appears best. If planned for properly, the growth can be controlled and managed. In any event, some of the student accounts could be sold off to the anticipated federal secondary market.

Option II

Option II has several strong points. The Minnesota Higher Education Coordinating Commission could be the lender, and the program could be developed rapidly, with only minimal additions to the staff of the present grants-in-aid program. Thus, it is quite inexpensive—low development cost, low total outlay and rapid recovery. Also, it seems conceptually simple and should be easy to administer and operate.

However, Option II does not really accomplish any of the goals which were set forth for a new program. It reaches some of the needy freshmen and some of the needy heavy debtors, but there is no reason to believe it would reach those without banking ties or local residences, unless it is also assumed that they too would be needy. (This might change with a large-scale increase in public tuitions and a commensurate expansion of the grant-in-aid program. In such an eventuality, Option II would become much more credible.) Because of the restricted clientele and manner of distributing funds, the state would not be able to use this system to expand to a broader FISL program, if necessary. Finally, because of the limitations imposed by the tie to the grant-in-aid program, the state could not use this pilot test to try new concepts in aid on a broad mix of student groups. As a vehicle, the grant-in-aid program would turn away some middle-class families who might have special needs for FISL loans.

RECOMMENDATION

The survey of financial aid officers and bank officials in the state of Minnesota indicated that the present federally insured student loan program is performing adequately except for a small number of students, estimated at 1,500 per year, who are unable to obtain loans. While it does not appear justified to develop a program to meet just this need, it is recommended that a pilot program be undertaken, which would solve this problem, provide the basis for an expanded state plan should this ever become necessary, and allow a test of some new concepts in loan aid delivery. The preferred option for implementing this pilot program is I-B —make financial aid officers authorized lending agents of a state agency under the FISL program. The program should be designed to provide loans to students throughout their college careers and to grow at a manageable pace.

APPENDIX F

REPORT ON STATE SCHOLARSHIP AND GRANT-IN-AID PROGRAMS

System	Initial Scholarship Awards								Initial Grants-in-Aid				Initial Awards Combined Scholarships and Grants-in-Aid							
	$ Amount	%	No.	%	Mon.	%	Hon.	%	$ Amount	%	No.	%	$ Amount	%	No.	%	Mon.	%	Hon.	%
State Jr. Colleges.....	50,250	3.7	197	7.1	103	5.4	94	10.9	111,200	8.0	232	10.6	161,450	5.9	429	8.6	335	8.1	94	10.9
State Colleges	138,425	10.3	444	16.0	267	13.9	177	20.6	319,400	23.1	615	28.1	457,825	16.8	1,059	21.3	882	21.5	177	20.6
Univ. of Minnesota.....	313,600	23.3	888	31.9	529	27.5	359	41.7	348,700	25.2	597	27.3	662,300	24.2	1,485	29.9	1,126	27.4	359	41.7
Total—Public Coll.....	502,275	37.3	1,529	55.0	899	46.8	630	73.2	779,300	56.3	1,444	66.0	1,281,575	46.9	2,973	59.8	2,343	57.0	630	73.2
Private 2-Year Coll.....	12,800	0.95	24	0.86	17	0.88	7	0.81	21,175	1.5	22	1.0	33,975	1.2	46	0.93	39	0.95	7	0.81
Private 4-Year Coll.....	799,525	59.4	1,155	41.5	951	49.5	204	23.7	479,300	34.6	515	23.5	1,278,825	46.8	1,670	33.6	1,466	35.7	204	23.7
Total Private Coll.....	812,325	60.3	1,179	42.4	968	50.4	211	24.5	500,475	36.2	537	24.5	1,312,800	48.1	1,716	34.5	1,505	36.6	211	24.5
Total All Colleges.....	1,314,600	97.6	2,708	97.4	1,867	97.2	844	97.8	1,279,775	92.5	1,981	90.5	2,594,375	95.0	4,689	94.4	3,848	93.6	841	97.7
AVTI	12,250	0.91	35	1.3	26	1.4	9	1.1	77,025	5.5	169	7.7	89,725	3.3	204	4.1	195	4.8	9	1.0
Hosp. Para-Medical	18,675	1.4	36	1.3	26	1.4	10	1.1	25,100	1.8	35	1.6	43,775	1.6	71	1.4	61	1.5	10	1.2
Private Technical	825	0.06	2	0.07	2	0.1	0	0	2,075	0.15	3	0.14	2,900	1.0	5	0.1	5	0.12	0	0
Total Non-College	31,750	2.4	73	2.6	54	2.8	19	2.2	104,200	7.5	207	9.5	135,950	5.0	280	5.6	261	6.4	19	2.2
1. Total Public Inst.....	514,525	38.2	1,564	56.2	925	48.2	639	74.3	856,325	61.9	1,613	73.7	1,370,850	50.2	3,177	63.9	2,538	61.8	639	74.2
2. Total Private Inst.....	831,825	61.8	1,217	43.8	996	51.8	221	25.7	527,650	38.1	575	26.3	1,359,475	49.8	1,792	36.1	1,571	38.2	221	25.7
TOTAL	1,346,350	100	2,781	100	1,921	100	860	100	1,383,975	100	2,188	100	2,730,325	100	4,969	100	4,109	100	860	100

1. Including AVTI
2. Including Hospital and Private Technical
3. Scholarship Program Only

APPENDIX G

PROGRAM REVIEW REPORT

THE COORDINATION OUTLOOK — ACADEMIC PLANNING

A BIENNIAL REPORT TO THE COMMISSION

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THE COORDINATION OUTLOOK — ACADEMIC PLANNING

A BIENNIAL REPORT TO THE COMMISSION

I. MANDATES

A. Planning

The general mandate which established the Minnesota Higher Education Coordinating Commission (Chapter 136 A, Minnesota Statutes 1965) and which the Legislature has reiterated in successive sessions (1967, 1969 and 1971) entrusted the Commission with the coordination function at the statewide level.

The language of the statutes envisions a voluntary cooperation of all post-secondary institutions and systems toward providing adequate educational opportunities in the best interests of the state and its people both collectively and individually. Explicitly the statutes oblige the Commission continually to study, plan and make recommendations without prejudice to the several areas of post-secondary education including academic programs.

The coordination functions of the Commission have their effects in two directions: (1) toward advising the people and state government, and (2) toward creating coordination among the institutions and agencies providing post-secondary education in Minnesota.

For the people and state government the Commission: (1) provides considered and research-based judgments to confirm extant coordination, (2) insures that coordination questions get adequate attention, (3) establishes priorities, (4) recommends new directions or abandonment of outmoded ones, and (5) requests or substantiates support and use of state resources.

For educational institutions and agencies, the Commission provides recognition, confirmation, encouragement, and services which develop and maintain coordination, such as: (1) channels of communication, (2) coordination networks, (3) mediation, (4) inter-institutional and inter-systems problem solving, (5) research and information, (6) legitimation of the state interest, (7) performance of a catalytic role in stimulating cooperative planning and study, (8) a leadership

role in adoption of new directions or abandonment of old ones, and (9) convening as necessary the producers of educated manpower.

B. Program Review

The Commission's overture in academic planning occurred in review of new academic programs.

In November of 1969, the Commission endorsed the concept of program review and inaugurated review of new programs. One month later, the Commission accepted a document called "Guidelines for Program Review" and published this subsequently in its report to the Legislature *Proposal for Progress*,[1] and *Meeting the Challenge*.[2]

In addition to defining data required in program proposals, the guidelines explicitly stated three criteria for assessing discrete programs:

1. Each proposed program will be judged in terms of the extent to which the program is consistent with the *mission* of the institution offering the program.
2. Each proposed program will be judged in terms of the extent to which the program duplicates existing programs or other proposed programs and whether the extent of *duplication* is desirable.
3. Each proposed program will be judged in terms of the relative *cost-benefit* of the program as viewed in terms of the total needs of higher education and the probable availability of funds to meet the total needs.

Consistent with the overarching objective of program review, these criteria collectively imply a fourth:

4. Programs must be consistent with the overall mission of the state in providing post-secondary opportunities that meet the needs of the citizen and the state.

The guidelines provided for appointment of a Curriculum Advisory Committee (CAC) broadly representative of the state's systems of formal post-secondary education, both public and private (chapter 136A.03, Subdivision 5). Through this committee and the Commission staff, the guidelines were applied, procedures were developed, and review of discrete new programs was conducted.

Several post-secondary institutions, through their respective system offices, submitted new programs for review during the Spring of 1970 when the Curriculum Advisory Committee was formally organized and began discussing review procedures.

Staff assistance was provided by the Commission. The first advisory report for full Commission review of new programs was submitted at the Commission meeting of February, 1970.

Since October of 1970, Academic Planning has been conducted by two staff members and one secretary who have served the program review processes conjointly with the Curriculum Advisory Committee in addition to their other duties in academic planning.

In May of 1971, the Legislature gave statutory recognition to the Commission's program review function, not only for new programs but also for existing programs, program plans of institutions and systems, and priorities; and it made the Commission responsible for making recommendations about these (Chapter 136A.04, subd. (D), Minnesota Statutes, 1971).

In June of 1972, during an address to the Commission, Governor Wendell Anderson also recognized the Commission's review function, promised the necessary assistance of the executive branch, and observed that forthcoming decisions of the Commission may well set the pattern of post-secondary education for thirty years.

II. MAKING THE MANDATES WORK

The coordination functions of the Commission take place within the processes and procedures it approves and are accomplished principally through the Commission staff, and through advisory and other groups established to cooperate with them. These bodies and operations culminate in the coordination judgment which is the sole responsibility of the Commission.

Review of programs is occasioned by the submission of program documents by the several systems or by staff working conjointly with the Curriculum Advisory Committee in developing advisements for the eventual judgment by the Commission. The original guidelines recognized different kinds of documents and identified formal proposals and preliminary proposals (intents, early warnings) as documents to be reviewed. The Commission also recognized the dynamic and growing nature of this coordination effort and therefore assumed the role of presiding over the development and codification of specific procedures (see Exhibit A) and flow processes (see Table 1) emerging from the collaboration and experience of the Curriculum Advisory Committee (Exhibit B) and staff, as acknowledged in *Meeting the Challenge*,[3] which made reference to procedures "to be refined later."

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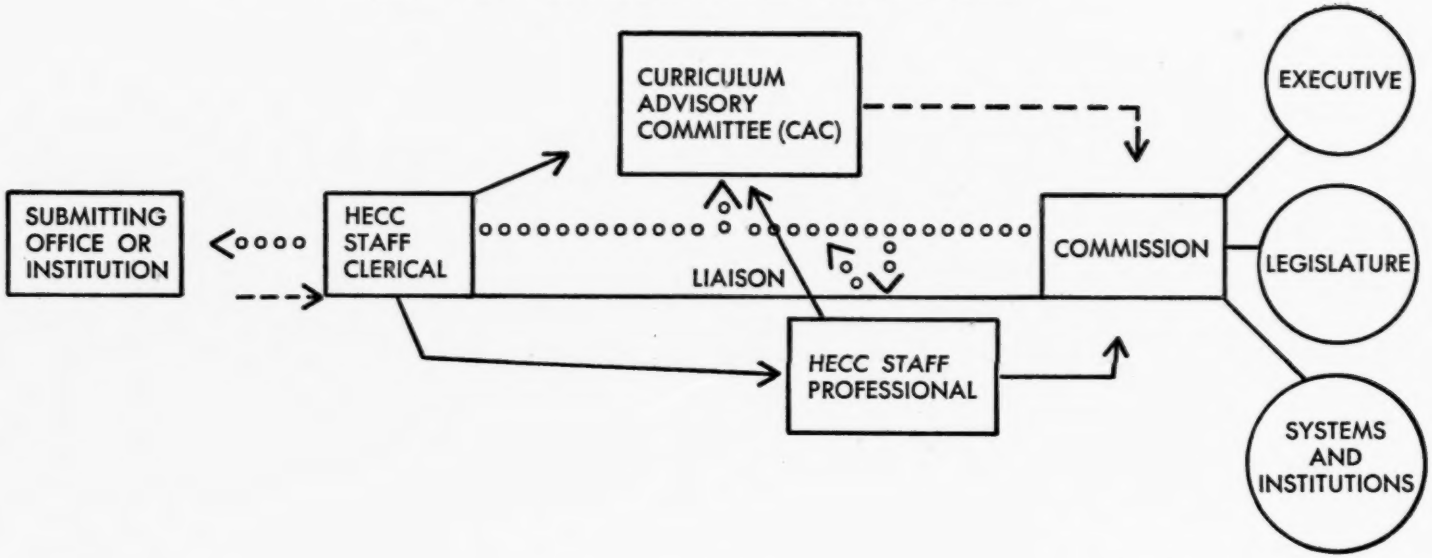
[1]Minnesota Higher Education Coordinating Commission, *Proposal for Progress: Guidelines for State Policy and Comprehensive Planning of Post-Secondary Education* (St. Paul: Minnesota Higher Education Coordinating Commission, January, 1969) pp. 67-72.

[2]Minnesota Higher Education Coordinating Commission, *Meeting the Challenge* (St. Paul: Minnesota Higher Education Coordinating Commission, January, 1971) pp. 88-90.

[3]*Ibid.*, p. 83

MINNESOTA HIGHER EDUCATION COORDINATING COMMISSION

TABLE 1: FLOW OF PROGRAMS IN THE REVIEW PROCESS



DOCUMENTS

PRELIMINARY PROPOSALS
FORMAL PROPOSALS
FOR INFORMATION ONLY
NEW INSTITUTION PROPOSALS
DISCONTINUED PROGRAMS

PROGRAM INVENTORY
BASIC FILE DOCUMENTS
CAC – STAFF REPORTS
AGENDAS

CAC MINUTES
CAC PROGRAM EVALUATIONS SUMMARIES
CAC RECOMMENDATIONS
CAC POLICY ISSUE IDENTIFICATION
JOINT REPORTS

STAFF EVALUATIONS
BRIEFS
CAMEO STUDIES
PLANNING STUDIES
FOR INFORMATION ONLY
FINAL REPORT OF COMMISSION ACTION TO SYSTEM CONTACTS
POLICY ISSUE IDENTIFICATION AND RECOMMENDATIONS
PLANS AND REPORTS

MECHANISMS

COORDINATION SEMINARS
COORDINATION-NETWORKS (development, maintenance)

The dashed line indicates written reports
The solid line indicates both written reports and discussion
The line of circles indicates feedback

In brief, the Curriculum Advisory Committee is a statewide planning and review structure which currently represents the majority of Minnesota's post-secondary producers of educated manpower through membership by key administrators. The staff provides clerical and maintenance functions for this structure. It also provides professional functions in academic planning and studies.

Both the Curriculum Advisory Committee and the staff make parallel recommendations on each program reviewed for ultimate action by the full Commission.

In voluntary coordination or self-regulation by the post-secondary community, a trust relationship exists with the institutions and systems.[4] They transmit documents for information or program documents through their respective system offices. The preliminary program document notifies of program planning and provides opportunity for comment, coordination and cooperation. If planning is completed, a full formal proposal is transmitted, reviewed by the Curriculum Advisory Committee and staff, and recommended to the full Commission for favorable or unfavorable review in terms of the guidelines. The ultimate Commission action is reported by the staff back to the institutions through their system offices.

In addition, either the Curriculum Advisory Committee or the staff can perform studies, raise policy issues, and request broader action than that applying to discrete programs (see Exhibit C).

The final report contains sections on new programs, preliminary proposals, information documents, new institutions, discontinued programs, existing programs, proposals withdrawn, tabled and unfavorably reviewed, policy issues, studies and seminars, and reviewed plans.

The entire process is further served by the academic planning efforts of the staff. Besides its clerical functions in servicing the process, the staff performs cameo studies on program areas, prepares staff evaluations of discrete programs, maintains a statewide inventory of existing programs, identifies policy issues in briefs and special reports, develops and maintains coordination networks of agencies having a legitimate interest in the production of educated manpower, designs models for academic and human resources planning studies, and reinforces liaison with all planning efforts of the Commission.

III. RESULTS

A. New Programs

Voluntary coordination is developmental. In the beginning, only new programs were reviewed. Indeed, almost a year elapsed from the time the Commission first endorsed the concept of program review until the process was staffed and formal procedures were developed.

Almost 1,000 proposals were submitted during almost thirty-six months since program review was first conceived (see Exhibits D, E, and F). Meanwhile, the Legislature, the Commission or the State Department of Education had approved twelve new institutions whose program plans were subsequently reviewed in New Institution documents.

Formal proposals that were finally reviewed amounted to 407 of the 987 (41 per cent). So far the 12 new institutions in this biennium, as might be expected, accounted for 9[illegible] of these 218 formal proposals or 42 per cent.

The 83 existing institutions accounted for the remaining 126 formal proposals, or an average of 1.5 new programs per institution to date for this biennium.

Not all of these proposals received favorable review, at least in the first instance, and of course many preliminary proposals are not expected to see the light of day as formal proposals (see Exhibit D).

New institution proposals were modified or conditioned in 100 per cent of the cases.

Unfavorable review is not the rule of thumb. Instead, the program review process allows for withdrawal and tabling of proposals, modification or conditional approval. Eight formal proposals, in this biennium have been withdrawn or tabled. Moreover, three proposals had important modifications and were favorably reviewed pending fulfillment of conditions applied by the Commission. The cumulative total of all formal proposals not directly approved amounted to 52 percent of such proposals.

Programs favorably reviewed reflect the extent to which institutions and systems planned, and the Commission recommended new educational opportunities for Minnesotans (Exhibit H).

The term "new" refers to innovative programs as well as merely additional ones, or substantial changes in established programs.

B. Other Programs

Perforce, attempts to look at existing programs are less than one year old, and the sheer volume of new programs, particularly from new institutions, has delayed plans for inaugurating review of existing programs.

Nevertheless, progress has occurred. It is expected that a diminished prospect for additional new institutions will provide the opportunity needed to pursue other relevant efforts in program review and academic planning.

[4]Curriculum Advisory Committee, *Minutes*, December 21, 1970.

30 discontinued programs have been reported to the Commission through the program review process. Commission action in program review has provided the occasion for cameo studies of several types of programs statewide, for establishment of planning processes in important areas or disciplines, and for joint reports of planning between institutions and systems. The affected areas are: farm management, animal technology, dental assisting, social work and human services, music, allied health, nursing, and non-traditional programs.

These efforts set precedent and priorities and afford opportunities for testing new coordination procedures, models for manpower studies, and planning processes which engage key Minnesotans in the production of acceptable planning guidelines which can be adopted by the Commission for statewide implementation by the systems and institutions.

Moreover, overtures have been made in the direction both of Commission invitations and of organizational requests to involve additional producers of educated manpower: the hospital schools, the private vocational schools and industry.

IV. OUTLOOK

Program review requires constant improvement and further expansion into areas of responsibility imposed by legislative and Commission action, as well as by the very nature of comprehensive academic planning. Even in areas where entry has been made, there remains unfinished business. All of this has placed severe constraints on staff time devoted to academic planning.

Not necessarily in order of priority, the following list of needed activities and projects in process fairly summarizes efforts that must receive immediate attention:

1. Implementation and testing of methods for review of all existing programs;
   a. Development of a uniform format of descriptors for submission of program designs for existing as well as new programs, which in turn affects
      (1) statewide inventory data and data retrieval systems
      (2) program cost data
      (3) programming data relevant to program budgeting and accountability
      (4) continuing education and extension;
   b. Expansion of efforts to produce cameo studies, which in turn affects
      (1) improvement of staff evaluations of discrete programs
      (2) mapping geographic distribution and utilization of programs
      (3) content analysis in program inventory or comparative program analysis;
   c. Development of plans and participative planning processes in specific disciplines, fields, occupations and occupational families, as in current efforts in human services, allied health, nursing, etc.
2. Refinement and further implementation of the guidelines-criteria, particularly needs data, mission and cost-benefit;
   a. Implementation of the Curriculum Advisory Committee—staff project in cost-benefit with recommendations for the Commission;
   b. Initiation of or further cooperation in manpower and human resources studies;
   c. Further development of academic planning research model as used in 9-10 Study, human services study, allied health study, nursing study with reference to comparative measures between student pool, statewide program design capacities, and manpower needs; apply model to counties, regions, state, institutional groupings, occupations and occupational families;
3. Development of a benefit determination system;
4. Development of a priorities determination system;
5. Further development of voluntary participative planning processes leading to acceptable statewide plans and Commission-endorsed planning guidelines;
   a. Final implementation of Coordination Seminars subsequent to studies in human services, allied health, nursing and music; determination of additional priority areas;
   b. Development of processes for faculty and student participation as appropriate;
   c. Invitation for further participation in coordination processes by proprietary schools, hospital schools and other training institutions, and by industry to the extent that they involve the production of educated manpower;
   d. Continued establishment of coordinated relations with other state agencies, professional organizations and individuals having a legitimate interest in the production of educated man-manpower;
   e. Evaluation of these and other methods for installing planning processes and involving pub-

lics having a legitimate interest in the production of educated manpower (coordination networks);

6. Improvement of liaison with community service and continuing education;

7. Development of grant proposals to assist implementation of one or more of these projects;

8. Establishment of networks of institutional planners and researchers for cooperative or complementary pursuit of statewide studies.

Work is in progress on each of these efforts, although in a few instances, notably benefit and priorities determination, conceptualization is all that has occurred so far. Only constraints on staff time prohibit swift pursuit of these objectives.

POLICIES AND PROCEDURES ADOPTED FOR PROGRAM REVIEW CURRENT STATUS

MINNESOTA HIGHER EDUCATION COORDINATING COMMISSION

Policies and Procedures Adopted For Program Review — Current Status

FOREWORD

This brief is intended to be used by individuals associated with the Program Review process. Updating from time to time is necessary to reflect the dynamic nature of the procedures.

Program review policies and procedures have emerged from the experience of the Curriculum Advisory Committee (CAC) and the staff; are codified from time to time in meeting minutes and precedents, which have been reviewed by the Commission; and are understood and operational at present.

This Staff Brief summarizes the policies and procedures adopted up to this time, without prejudice to additions and refinements that may evolve from future experience. The Brief replaces the similar document circulated one year ago, dated April 15, 1971.

It should be said that the Staff employs various clerical procedures to facilitate flow in the review process, but that these procedures do not fall within the purview of this Brief. The flow itself has been described in other Staff Briefs entitled MPERT - 1 and Flow of Programs in the Review Process dated March 21, 1972.

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Information Systems
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CAC Meetings

The first Monday of each month is the regular meeting day with primary concern for review of proposals. (CAC Minutes 9/11/70, p. 2)

Formal Program Proposals take precedence for action in the regular meeting. (Precedent since 9/70)

Eight members constitute a quorum. (Precedent since 4/70)

The third Monday of each month is the extra meeting day when one is needed, with primary concern for non-program discussions. (CAC Minutes 9/11/70, p. 2)

CAC members unable to attend committee meetings will notify the HECC staff prior to the meeting in the event the expected number of members anticipated is less than a quorum (Precedent since CAC cover memo 4/5/71)

Procedures—Curriculum Advisory Committee

Tenure of each Committee member is to be determined by the system which nominates him. (CAC Minutes 1/9/70, p. 1)

Only appointed Committee members may vote. (Precedent since 3/70)

The Committee will review all program proposals that come before the Committee. (CAC Minutes 2/6/70, p. 3)

The secretary to the CAC will be an HECC staff member. (CAC Minutes 9/11/70, p. 1)

The term of the chairman will be one year. (CAC Minutes 9/11/70, p. 1) A Vice-Chairman will be elected after a Chairman is elected using the same process used in electing the Chairman. (CAC Minutes 8/16/71)

In absence of the chairman, the HECC staff member will act as temporary chairman until a temporary chairman is elected from the group. (CAC Minutes 9/11/70, p. 2)

The chairman is elected by secret ballot with the first ballot being a nominating ballot. (CAC Minutes 9/11/70, p. 1)

The CAC will not act on new minors where majors are present. These minors will be submitted though, in order to have them on the inventory. (CAC Minutes 9/11/70, p. 5)

The chairman will have the CAC take time after each vote on a Formal Proposal (or on groups of proposals, if appropriate) to formulate a written statement of the salient reasons which explain the vote. (CAC Minutes 12/21/70, p. 2; 1/18/71, p. 1)

CAC members will provide the Commission with a vitae. (Precedent since 11/71)

Visitors are welcome to hear reports to the CAC for the benefit of exchange of information. Committee members are responsible for notifying persons who might be interested visitors. (Precedent since CAC cover memo 4/12/71)

Minutes will not reflect or record an individual as to the manner of his vote, unless requested by the individual. (Precedent CAC Minutes 6/21/71)

Actions on motions that are passed are recorded as having been either unanimous or by majority. (Precedent since CAC Minutes 6/21/71)

If a vote record, either by number or name was necessary, it would take a motion with a majority vote to make it a matter of record in the minutes. (Precedent since CAC minutes 6/21/71)

CAC members notifying the Staff of their absence prior to a meeting will be listed as excused in the minutes of the meetings. (Precedent since CAC cover memo 7/16/71)

It is not appropriate for the Curriculum Advisory Committee to deal directly with professional organizations. (CAC Minutes, 6/5/72, p. 6)

Private college representatives indicated that they would take on the role of inter-institutional communication concerning private college proposals (CAC Minutes, 10/2/72, p. 5)

First nominating ballots for chairman or vice-chairman proceed with the undertanding that if a majority nominates one candidate there is no election ballot needed. (CAC Minutes, 9/11/72, p. 2)

The committee will receive the materials one week prior to the meeting and internal procedures be modified to make this possible. (CAC Minutes, 10/2/72)

Policies and Procedures Used in Program Review—Staff

Develop a model for curriculum development statewide which will not be used as a directive but as a resource in making decisions about needs, duplications, and development. (CAC Minutes 10/19/70, p. 1)

Serves as secretary and liaison to the CAC. (CAC Minutes 10/19/70, p. 1)

Serves as an information screen for programs before they are submitted to the CAC. (CAC Minutes 10/19/70, p. 1)

Appends an evaluation to each Formal Proposal which may be the result of a cameo study. (CAC Minutes 10/17/70)

Staff evaluations may appear in the form of comments

because time did not permit independent studies. (Precedent since CAC cover memo 4/5/71)

Formal proposal numbers will bear the same number as the preliminary proposal. When an original submission is made only at the formal stage, there will of course be no corresponding P-number (Precedent since CAC cover memo 4/5/71)

Staff provides a liaison function between committees. (Precedent since 3/19/71; see CAC cover memo 4/5/71, p. 2)

Develops papers on the review process e.g., Preliminary Proposal Brief, MPERT - 1. (CAC Minutes 11/11/69, pp. 1-2; 1/19/70, p. 7)

Staff judgments are appended to program proposals only when the staff considers it necessary. (CAC 2/15/71, p. 2)

Preliminary Proposals will be reviewed by the staff to see that adequate information is provided prior to their circulation at CAC meetings. (CAC Minutes 7/10/70, p. 2)

Staff will engage in discussions with ASTD (Precedent since 2/7/72)

Staff evaluations may be revised based on additional input during Committee meetings. (Precedent since CAC cover memo 5/10/71)

Reports to the Commission are routinely included in the CAC mailout. (Precedent since 4/71)

Appointments to the Curriculum Advisory Committee as announced after all of the inter- and intra-office communication is completed. (Precedent since CAC cover memo 6/21/71)

Formal Proposals are forwarded to the computer advisory committee at the same time as the Curriculum Advisory Committee when program proposals contain computer implications of concern to the statewide plan for computing. (CAC Cover Memo, 10/2/72)
Evaluation formats should:

1. Continue to show programs by region;
2. Show design capacity of new and existing programs with statewide total;
3. Add firm dates for the traditional 1st, 2nd, 3rd, 4th and 5th years;
4. In the areas of Cost-Benefit and Priority, where the criteria for opinion has not yet been formalized, state the opinion in positive terms wherever possible.

Proposals — General

The number of copies of new programs submitted to HECC should be twenty-five. (CAC Minutes 1/9/70, p. 2)

All proposals should be submitted to HECC at least two weeks prior to the CAC meeting in which they are to be considered in order to have time to process and study them. (CAC Minutes 4/7/70, p. 5)

Each proposal for review, when submitted to the Curriculum Advisory Committee, should be accompanied by an attached summary sheet which will contain a brief and concise answer to each of the points now included in the check list prepared by the staff. Such statements should be limited to a routine or brief paragraph, with reference to sections of the accompanying proposal documents as necessary. Each Preliminary Proposal when submitted to the CAC should contain, or have attached to it, a concise summary of answers and the points called for in the HECC guidelines for Preliminary Proposals. (CAC Minutes 8/20/70, p. 2)

Only programs with adequate information, based on staff judgment, will come before the Committee. (CAC Minutes 6/5/70, p. 4)

There should be appended a summary paragraph containing the judgment of the HECC staff about matters which are particularly pertinent in each case in making Committee decisions. (CAC Minutes 8/20/70, p. 2)

All proposals will be numbered. (CAC Minutes 2/6/70, p. 2)

CAC members will individually write critical comments for Formal Proposals submitted by private institutions and forward them to those institutions. (CAC Minutes 12/7/70, p. 4)

The CAC seemed to have a concensus that the Commission should continue to review programs monthly at least until it could decide on means of delegation. (CAC Minutes 8/81/71, p. 4)

Proposals — Formal

All formal Proposals will include implementation dates (first student in the program). (Precedent since 4/70)

All formal programs will include evidence of coordination communication between potentially affected programs, systems and instructional sites. (Precedent from 5/3/71)

The CAC motion for the private colleges will be scrutinized on the same basis as public institutions (since CAC Minutes 2/23/72 cover memo to the Commission).

Formal Proposal development might be improved related to coordination:

1. Program planners building on experiences in other systems.
2. When surveys are used information should be given as to the area of the survey, the ratio responding number of employees in addition to that being hired.

3. The availability and accessibility of federal vocational dollars for occupational programs in colleges.
4. How to define statewide programs, e.g. in terms of where graduates can go for jobs. (CAC Minutes, 7/10/72, p. 4)

The Commission will continue to expect firm evidence that each institution, in proposing a new program, has taken initiative early in the planning schedule to involve other institutions which may be affected by its proposal. (Commission 4/28/72)

Post-Baccalaurate Professional Development programs involving consideration of resources will be considered as formal proposals. (CAC Minutes, 5/15/72, p. 3)

Proposals — Preliminary

The CAC will take action receiving Preliminary proposals. (CAC Minutes 9/11/70, p. 2)

1. The formal or final proposal is key to the program review process. The preliminary proposal, as described in the staff paper, is a valid category. For the purposes of communication and coordination, each institution, system and the state is well served by the preliminary proposal.
2. The Committee recognizes that coordination benefits by early warning, and encourages institutions and systems to comply by voluntary submission of preliminary proposals in a form and at a time deemed suitable to foster coordination without doing violence to internal procedures.
3. The Committee encourages each institution and system to design procedures for, and to make decisions about, program review submissions with the common objective of *fostering* voluntary coordination. If this positive spirit obtains, the Committee is satisfied that the institutions and systems are capable of making competent decisions:
   a. About the *kinds* of academic change about which information should be disseminated to foster coordination;
   b. About the *types* of academic change which lend themselves to being considered properly as new programs, or as changes which nevertheless should be submitted to broaden the information-base supporting coordination;
   c. About the proper *category* (information only, preliminary proposal, formal proposal) in which relevant academic changes should originally be submitted for coordination review;
   d. About the *time* at which any kind of change in any of the categories is properly submitted consistent with fostering coordination;
   e. About new program *exceptions* to the normal sequence of preliminary then formal submissions because the character or special circumstances of the programs indicate that the preliminary proposal would serve no useful coordination purpose;
   f. And about the *scope of data* that would best support coordination in cases of "information only" and preliminary submissions.
4. The institutions and systems are advised:
   a. That the Committee and the Commission retain the option of reviewing the accuracy of specific decisions of the kinds mentioned and, when a substantive doubt arises, of initiating further investigation to resolve the doubt, or
   b. In the case of a formal proposal made as an original submission, of re-designing it as a preliminary proposal and of so informing the institution when, in the judgment of the Committee or Commission, the preliminary proposal would have been the proper original submission;
   c. That in cases of re-designation, delays will be unavoidable;
   d. And that the formal Committee action pertaining to preliminary proposals is confined to receiving information for dissemination and to discussing their content in view of arriving at helpful comments, when relevant, to assist the submitting institutions in further planning for the formal proposal. (CAC Minutes 12/21/70, pp. 4-5)
   e. Comments of the type appropriate to preliminary proposals may be made orally, as suggested during the meeting of March 1, 1971 (Precedent since CAC cover memo 4/5/71).

Proposals — For Information

Matters to be submitted "for information" probably should be left to the good offices of the submitting institutions and systems, with trust in their judgment as to what is suitable and would further coordination, and with the understanding that the CAC and Commission are empowered to make further investigation when a change appears to warrant submission as a Formal Proposal. (CAC Minutes 12/21/70, p. 1)

The judgment of an institution to define "program" could be accepted so long as the CAC and Commission have the oportunity to evaluate the judgments and investigate further. (CAC Minutes 12/21/70, p. 1)

Proposals — New Institutions

New institution heads are invited to discuss their program plans with the CAC. (CAC Minutes 10/5/70, p. 6)

All job entry programs are brought back to the CAC for the usual review. (CAC Minutes 11/1/71, p. 2)

(FIO-28A — Memo from Donald Draine to Messrs. Staloch and Madson 10/21/70)

Confirmation and Resume: Details of Program Presentation, New Area Vocational-Technical Institutes (Dakota, Ramsey-Washington and Hennepin)

By meeting and telephone, we have confirmed with Mr. Hawk and Dr. Dille the plans for program presentations of the three new AVTI — substantially as we discussed them in our meeting yesterday.

For the record, I'll set them down here, based on a review of the notes I made.

1. The System should invite each Superintendent to make a brief presentation at the next regular meeting of the Curriculum Advisory Committee. Of course, brevity and conciseness will be much appreciated.
2. Each presentation should be reflected in a written document with copies for the members of the Committee and for the Secretary. We should be aware that if the Committee receives these documents only during the meeting, it may well postpone serious discussion of programs.
3. After presentations, the agenda will include a period for program discussion. You will have kindly informed the Superintendents that the Committee will pursue such discussion only among its members, and that it expects the AVTI representatives on the Committee to act as resources.
4. The presentations and documents will of course describe background, objectives and philosophy, students served, rationale, and other general topics as we discussed them. But the particular focus should be on these three points:
   a. a general overview of the curricular program,
   b. a description of relative emphasis on the six categories of occupational programs as designated in my memo of 10/20/70, and
   c. within each category, an inventory list of specific programs and courses planned for the inauguration of the institution.

The last item is for coordination purposes insofar as information helps HECC and all Systems to focus and adjust plans.

5. Mr. Hawk pointed out that the Committee may decide to request further information on one or more specific programs or courses, or even formal proposals. Mr. Hawk and Dr. Dille are aware of the general issue involved, namely, how to accommodate program review for new institutions. They seemed comfortable with the approach proposed here so long as it was not that kind of precedent which would preclude improvements suggested by further experience.
6. I mentioned to both of them the same point we had discussed, namely, that as the work of the Committee develops over time, it may wish later to review and evaluate the items on the inventory list in 4c above. But this would not come as special scrutiny of the AVTI. Rather it would become a routine review and evaluation in the regular program review process for all institutions.

(F10-28B Memo from Donald P. Draine to Messrs. Bergstrom, Bergstrom and Wilkins — 8/22/71)

Subject:
Confirmation and Resume: Details of Program Presentations, New Junior Colleges at Cambridge and Fairmont. — at CAC Meeting of 11/1/71

This memo will summarize our exploratory discussions concerning procedures to follow in program review presentations for the two new junior colleges, as well as the concurrence of the Executive Director and CAC Chairman in these procedures.

Our discussions referred to my memo of 10/21/70 which outlined procedures for new institution presentations a year ago. The present memo confirms and further specifies the procedures and their underlying principles. Indeed these do not differ substantially from those used in new institution presentations made prior to last year's memo.

For your information, however, it should be noted that the similar presentation contemplated for the new Metropolitan State College Center will generally follow the same procedures with but one variation based on the experimental nature of the institution and on the legislative requirement that HECC make a formal program review report on the institution in the Spring of 1972. That is, the Metro State College review will follow the procedures twice, once tentatively this Fall in view of inaugurating experimental programs to test feasibility, and again officially in the Spring in terms of permanent plans based on the pilot experience.

PRINCIPLES

1. The Minutes of the Curriculum Advisory Committee of 12/21/71, reviewed by the Commission and the then-existing Committee A, determined that the institutions and systems would be relied on to fix the time, conduct, manner, etc. of making program presentation consistent with good coordination practice, on the provision that the CAC and Commission retain the right to re-designate these matters when necessary in their judgement.
2. It is recognized that up to now in most cases the decisions to establish new institutions have occurred at levels outside and above the program processes engaged in by the Curriculum Advisory Committee and the Academic Planning Staff, but not without

reference to the Commission. These processes operate, therefore, with givens and consequently focus on specific programs from the viewpoint of coordination.

3. Nevertheless, because of the complexities and restraints affecting administrators and faculties in inauguration of new institutions, the program review process should be as accommodating as possible for new institutions, particularly in regard to levels of specificity at this initial stage.
4. While the presentations may therefore be general; they should also provide enough specific information to support good coordination practice without necessarily including the usual full documentation on each proposed program.
5. The presentations and documents should describe for the institution its background, objectives and philosophy, students served, rationale, budget and sources of funds and other relevant general topics. The particular focus should be on:
   a. a general overview of the proposed curricular program;
   b. a description of the relative emphasis on general program categories appropriate to the type of institution; and
   c. an inventory list, within each category, of specific programs and courses planned for the inauguration of the institution.
6. Programs proposed after review of the inventory list are subject to regular review through established procedures with full documentation.
7. This process and sequence for new institutions does not prevent an institution either from providing full documentation on one or more specific programs simultaneously with the general presentation or from later submitting one or more programs from the inventory list to regular review with full documentation. The CAC Commission may require this in specific instances for special reasons.
8. In general, however, it is the institution's responsibility to make this decision, which is consistent with the principle of trust described in #1 above. In the past several institutions have volunteered programs for full review in addition to or in lieu of the general presentation designed to accommodate the administrators and faculties. This was both consistent with good coordination practice and a protection to the institution.

Procedures

1. The CAC and staff hereby invite the chief officers of the new institutions to make a brief presentation at the next regular meeting of the Curriculum Advisory Committee. Of course, brevity and conciseness will be much appreciated.
2. Each presentation should be reflected in a written document with 25 copies for the members of the Committee and for the Secretary. We should be aware that if the Committee receives these documents only during the meeting, it may well postpone serious discussion of programs.
3. After the presentations, the agenda will include a period for program discussion. You will kindly have informed Dr. Wilkins that the Committee will pursue such discussion only among its members, and that it expects the Junior College representatives on the Committee to act as resources.
4. The presentations and documents will of course describe background, objectives and philosophy, students served, rationale, and other general topics as we discussed them. But the particular focus should be on these three points:
   a. a general overview of the curricular program;
   b. a description of relative emphasis on the general programs and,
   c. within each category, an inventory list of specific programs and courses planned for the inauguration of the institution.

   The last item is for coordination purposes insofar as information helps HECC and all systems to focus and adjust plans.
5. We understand that Dr. Howard Bergstrom will make a preliminary statement and then introduce the chief officers of the new institutions, who will make whatever comments they feel necessary to supplement the documents.
6. The staff will have provided the routine written draft of a staff evaluation based on the documents.
7. We have the full documents on two programs prepared for the new institutions. They have been assigned preliminary numbers and will proceed through the normal channels.

DPD:nc

(F10-28C Memo from Donald P. Draine to Messrs. Hays and Sweet 10/22/71)

Subject:

Confirmation and Resume: Details of Program Presentation for new institution: Metropolitan State College Center

The enclosed memo referring to new institution presentations by junior colleges will apprise you of the principles and procedures established for such presentations.

That memo also refers to our agreement to have the Metropolitan State College presentations adapt to the

same procedures, even while the procedures accommodate the special circumstances of Metropolitan State College Center. I have in mind particularly the fact that the institution is at the same time new and experimental in nature, as well as the legislative request for a HECC review to be reported in the Spring of 1972.

It seems to us, therefore, particularly appropriate that the institution has chosen not only to follow the procedures, but also to present both an admirable pilot test and a subsequent review presentation based on its pilot experience.

To confirm our conversations, then, let me set down the process in outline form:

I. Pilot Phase

A. Preliminary Proposal

1. Prospectus II document present to Curriculum Advisory Committee for comment.

2. Presentation at CAC Meeting of 11/1/71.

B. Formal Proposal

1. Prospectus II document with routine written draft of staff evaluation presented to CAC for action recommended to Commission.

2. Presentation at CAC Meeting of 11/15/71 with Dr. Sweet's comments.

3. Presentation during program review agenda items at Commission Meeting of 11/23/71 with Dr. Sweet's comments.

C. Inauguration of pilot programs by institution during January term, 1972.

II. Tested Phase

A. Preliminary Proposal

1. Prospectus III document presented to CAC for comment.

2. Presentation at CAC Meeting during Spring of 1972.

B. Formal Proposal

1. Prospectus III document with draft of staff review presented to CAC for action recommended to Commission.

2. Presentation to CAC Meeting during Spring of 1972.

C. Legislative Report: Presentation to Commission during Spring of 1972.

The CAC and Staff hereby request you to invite those persons from the institution whom you deem most appropriate to comment and assist the CAC and Commission at the various pilot points mentioned in the outline above. I feel confident, however, in saying that I think the CAC and the Commission surely want to hear from Dr. Sweet, at least at the formal proposal stage.

DPD:nc

Proposals — Drop or Discontinued

Discontinued programs are submitted (precedent since CAC cover memo 4/5/71, p. 2)

JOINT REPORTS

Joint Reports from two systems are used as a vehicle for clarifying relationships. (CAC — May 1, 1972)

COORDINATION SEMINAR

The Curriculum Advisory Committee will be involved by providing inputs to the staff in suggesting the kind of policy statements which will be useful to the committee in reviewing programs. The Curriculum Advisory Committee's advice on issues surrounding the seminar will also be important in developing useful and creditable statements of policy. It should be noted that the Curriculum Advisory Committee's minutes reflect the interest and concern of the committee for statements which are useful in regard to mission questions. This seminar's development reflects those concerns.

The staff of the Commission will be the primary organizer and coordinator, working to include the range of key Minnesotans needed for the effective completion of the seminar. Direct contact with institutional representatives will be initiated through both the Curriculum Advisory Committee and system contacts as appropriate. Key Minnesotans in the field outside of educational institutions will be invited to participate by the Commission staff after general consultations with institutions (systems) and the Resource Center. The development of a timetable will be somewhat constrained by a conclusion date of late summer. (F10-36, 2/29/72, CAC Mailout)

Any recommendations to go to the Higher Education Coordinating Commission in a report, should come to this committee for comment prior to submittal to the Commission. (CAC Minutes, 5/1/72, p. 4)

Policy

Each of its members should provide information about their progress in (1) Management Information Systems, (2) costing procedures and (3) progress toward program budgeting. (CAC Minutes 8/20/70, p. 2)

Developments in Management Information Systems useful to Planning are periodically discussed with the CAC (precedent since 3/15/71)

Each system should inform the Curriculum Advisory Committee and HECC of the procedures for submitting Preliminary Proposals for information and final proposals for review, and this information should indi-

cate at what stage such proposals are transmitted to HECC. (CAC Minutes 8/20/70, p. 2)

The Commission should request each system to bring forward statements of system mission to guide in the work of CAC. (CAC Minutes 8/20/72, p. 1)

The CAC has advisory responsibilities in addition to program review. It may identify or study the larger issues they discover either as needed premises to program review work or as implications for policy arising from program review; it may take the lead by aiding the Commission in framing, suggesting, raising, studying or making recommendations about workable procedures, coordination and policy issues in statewide academic planning, and the CAC may stand as a constant in these functions regardless of organizational changes that may occur within the Commission and its working Committees. (CAC Minutes 12/21/70, p. 2)

When mission statements are indeed developed, the CAC should advise on procedures and criteria for this endeavor, or perhaps should perform its own endeavor in parallel. (CAC Minutes 12/21/70, p. 2, p. 1)

The CAC agreed that it was comfortable with the procedures used in program review by the several systems and the differences between them as far as the work of the Committee is concerned. (CAC Minutes 4/19/71, p. 2)

Agendas are worked out by the staff in conjunction with the Chairman of the Committee. (Precedent since 9/70)

CAC comments concerning the substance of the staff paper on the status of program review included the suggestion that the role of the state be made explicit with respect to not being limited to the geographic boundaries of Minnesota. (CAC Minutes 8/21/71, p. 4)

Topics can be flagged for the Commission as they arise regarding improvement of the Guidelines and policy topics which require Commission deliberation. (Precedent, CAC Minutes, 5/15/72, p. 1)

The Curriculum Advisory Committee decided to have a seminar related to cost-benefit. Committee members will assist the staff in preparing a bibliography and materials on cost-benefit for study by the members. It was agreed that some kind of statement should come out of this for the Commission. The topic, "The Public Intent," will be subsumed in the cost-benefit seminar.

The CAC endorses the need for careful preparation of mission studies by institutions and systems to assist this committee in evaluating program proposals and believes that the systems as a whole need more time both for internal discussion and discussion with the Advisory Council, and discussion between the Council and Commissioners prior to the adoption of operational procedures by HECC. The CAC reiterated its desire to be of assistance in developing mission statements that will be useful to this Committee. (CAC Minutes 10/18/71, p. 3)

(Statements by the Executive Director, CAC Minutes 11/5/71, pp. 1-2)

1. The impetus to engage in a mission study had come from several sources, including the CAC. It is a necessity for systematic planning, as well as for aiding application of the guidelines for program review.
2. Judgements implying perceptions of missions are constantly being made by various persons and groups such as the CAC and HECC. It is necessary to determine whether these perceptions are appropriate, consistent, and comparable, and to what extent they have affected decisions that have been made.
3. It is understood that mission statements should be dynamic in order to reflect change and progress, and at the same time stable so they can be depended on. The balance may not be easy to achieve.
4. There is never a perfect time for doing a mission study, always there are apparent reasons for delay. It will be advantageous for institutions to participate in order to assure representative input.
5. It is preferable for the CAC not to be concerned here about overstepping its mandate. It is clearly a working body that can be relied on to serve the state with the best academic expertise available. It is this expertise that is being requested —
   a. primarily on what should be the character and content of the mission statements,
   b. but not without attention to whatever advice the Committee can give on other issues such as effective procedures.
6. The intention is for the Staff to take this advice and incorporate it into material for the Advisory Council whose advice in turn will go to the Commission.
7. It is not the objective to have mission statements enacted into law. But if an existing law does not accommodate a mission statement, attempts can be made to revise the law.

(Statements by the Chairman, + CAC Minutes 11/5/71, pp. 2-3)

1. A mission statement can be considered a general philosophical expression of principles and desired thrust for an institution. Or it can be a specific operational statement.
2. It is difficult for an institution or system to develop a fully adequate mission statement without adverting to what other institutions and systems are contemplating for their statements.

3. Correlatively, if discrete statements are elicited from each institution or system, there is question of how they can be collated in a single, effective document, and by whom.

4. Likewise, the information ought to be comparable between institutions and systems.

5. Above all, what information will be helpful for the Committee?

6. There is a question about the amount of time required for an institution to develop a significant mission statement, particularly under constraints imposed by circumstances such as HECC's schedule and the re-assessments currently required in some institutions or systems.

7. Perhaps some limitations are in order, at least for the present and under time constraints, such as concentration on less-than-baccalaureate programs. Most problems have occurred in this area anyway.

8. How will the statements be used? Ideally they are used dynamically to aid long-range planning and to make operational decisions in the short-term. But a tendency exists to over-use them, even to legislate them.

9. Important groups, for instance the legislature, have not yet been sufficiently educated to the concept and requirements of acceptable long-range academic planning.

(Statement of Agreement by the CAC Minutes 11/5/71, pp. 3-4)

— That a long-range academic planning process needs to be developed, especially to obtain the kind of statements that are needed in the short-range;

— That the process must inherently contain the element of reiterability and that this must be made clear to everyone to avoid any tendency to ossify or legislate unalterable mission statements and to permit institutions to develop mission statements in a gradual emergent fashion;

— That first steps should be taken now and these can be the bases for future development of the mission-study effort;

— That the process should occur in a step-wise pattern, starting in an operational approach with what can be done quickly;

— That the beginning should occur with a mission statement developed in and submitted by each institution, and by each distinct campus of multi-campus institutions;

— That both a philosophical and an operational statement are needed, the former to support acceptable long-range planning and the latter as an immediate first step;

— That together these comprise a "contingent statement of the present" — the philosophical portion being descriptive of what the institution is now trying to accomplish, the operational portion being descriptive of what the institution is now doing, and the portions together being descriptive of an hypothesis and its test;

— That an adequate content for mission statements should address at least these descriptors, adaptable to make information comparable between institutions and systems:

1. Categories of programs
2. Substantive areas of programs
3. Levels of programs with precision and comparability in sub-baccalaureate programs
4. Types of students
5. Constituency
6. Distances and areas served
7. Socio-economic data
8. Research
9. Extension and community service
10. Extent of open admissions
11. Open education opportunities

— That immediate attention might be confined to those parts of a total mission statement which refer to sub-baccalaureate programs in institutions and systems;

— That there should be some indication of the way each institution in a system may have a discretely different mission than the system, of how this affects the institution's programs particularly as they come to this Committee;

— And that there should be some indication of what program characteristics are or are not, in the institution's opinion, best suited to the stated mission.

The Committee agreed to Dr. Werntz's conclusion to the discussion: The Staff will arrange to summarize this conversation in the minutes as the Committee's statement of how far we can go today. Mr. Hawk and the Staff will put these points together, and carry them to the appropriate bodies as the Committee's suggestions about (1) ways to get the mission effort started, and (2) ways by which the Committee will be helped.

Exhibit B

MINNESOTA HIGHER EDUCATION COORDINATING COMMISSION

SUITE 400
CAPITOL SQUARE
550 CEDAR STREET
SAINT PAUL 55101

October 20, 1972

CURRICULUM ADVISORY COMMITTEE (CAC)

DEPARTMENT OF EDUCATION

Mr. Robert Madson, Director
Program Operations
Department of Education
Capitol Square Building
550 Cedar Street — Room 540
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Phone: (612) 296-3387
***

Dr. William Knaak, Superintendent
Special School District 916
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Phone: (612) 770-2351
***
Chairman of the CAC

Mr. James E. Staloch, Coordinator
Post-Secondary Vocational Education
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***

STATE JUNIOR COLLEGE BOARD

Dr. Howard E. Bergstrom, President
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***

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UNIVERSITY OF MINNESOTA

Dr. Lloyd Lofquist
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***

Dr. James H. Werntz, Jr.
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***

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Graduate School
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***
Vice-Chairman of the CAC

PRIVATE SECTOR

Dr. Ellis Jones
Associate Dean
Gustavus Adolphus College
St. Peter, Minnesota 56082
Phone: (507) 931-4300
***

Dr. Kenneth L. Janzen, Dean
Hamline University
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Saint Paul, Minnesota 55104
Phone: (612) 641-2206
***

Sister Karen Kennelly
Academic Dean
College of St. Catherine
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***

STATE COLLEGE BOARD

Dr. Garry Hays
Vice-Chancellor of Academic Affairs
State College Board
Room 407 — Capitol Square
St. Paul, Minnesota 55101
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***

Dr. Roland Dille, President
Moorhead State College — Owens Hall
Moorhead, Minnesota 56560
Phone: (218) 236-2243
***

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Minnesota Metropolitan State College
421 North Wabasha
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***

Total CAC Members: 15

Exhibit C

Document and Process Identification and Purposes

1. **Preliminary Program Proposals**
   This document occasions the beginning of formal coordination in the statewide mode. It precedes the formal proposal and provides an opportunity for all interested parties to raise the specific coordination questions that the formal proposals must take into account.

2. **Formal Program Proposals**
   Formal program proposals stand as evidence of statewide coordination and communication with attention to: Institutional mission, justifiable duplication, relative cost-benefit and mission of the state in fulfilling the needs of citizens and the state on the basis of justified need and priorities.

3. **For Information Only**
   For Information Only documents, (F10's), are for the purpose of furthering coordination and are submitted by institutions, systems and staff. This is with the understanding that the Curriculum Advisory Committee, staff and Commission are empowered to make further investigation when a change appears to warrant submission as a Formal Proposal.

4. **Discontinued Programs**
   The institutions forward information on discontinued programs to retain accuracy in the inventory of programs and for Commission action at such time as the discontinuance of a program would be judged as not being in the best interest of the state.

5. **New Institution**
   New Institution proposals occasion the formal coordination and communication in the statewide mode with regard to the coordination issues and problems attending a proposed new "mix" of educational opportunities and access within the state or a region. Not only do they represent a coordination mechanism, but also a protection to the new institution in assuming that the time and funds used in planning will conclude in viable and feasible programs.

6. **Basic File Documents**
   The range of file documents organizes and retains the experiences, judgements, actions, research, studies and activities in such a manner as to provide a basis for daily operations and a basis for organizing and synthesizing their substance for Commission action. Examples are the staff evaluation of briefs, in many forms, policy statements, coordination seminars and networks, etc.

7. **Staff Evaluation**
   These documents are the repository of staff judgement and research and serve both as a framework for efforts to fulfill the intent of the criteria

in "Guidelines for Program Review" and a catalyst in raising the need for refining the coordination issues and the information and processes needed to support statewide coordination.

8. **CAC — Staff Reports**
The document containing the advisements to the Commission. The document includes a staff summation, CAC motions and comments, and staff evaluations on New and Existing programs, and substantive Topics of Coordination under development.

9. **CAC Minutes, Program Evaluation and Summaries — (recommendations)**
The documents describing the formal coordination and considered judgment of the Curriculum Advisory Committee. These may include policy or issue identification for resolution by the Commission which in the judgment of the Curriculum Advisory Committee would further the coordination efforts in the state.

10. **Joint Reports**
Documents containing the coordination efforts on special problems between systems or institutions.

11. **Special Seminars**
Special projects of the collective systems and staff to further develop and implement the intent of the criteria in "Guidelines for Program Review," e.g. Cost-Benefit Seminar.

12. **Cameo Studies**
These are staff studies of discrete program areas by way of presenting data in support of staff evaluation of individual program proposals.

13. **Staff Briefs**
On special issues or at the request of the Commission or Committee, the staff prepares reports providing information on alternative policy positions.

14. **Coordination Seminars**
This process involves special studies and involvement of key Minnesotans in making policy recommendations to the Commission and the convening function of the Commission in bringing together both the citizens of the state and the post-secondary institutions and systems.

Exhibit D

PROGRAM REVIEW, DOCUMENT FILE AS OF SEPTEMBER 22, 1972

CATEGORY	Number Since June 18, 1971 (current biennium)	Total Since November, 1969
1. FORMAL PROPOSALS		
favorable review	209	
conditional or unfavorable review	7	
withdrawn	2	
SUBTOTAL	218	407
2. PRELIMINARY PROPOSALS		
became formal	83	
pending formal	186	
SUBTOTAL	269	538
(NOTE: Does not include proposals that were submitted as formal programs.)		
3. NEW INSTITUTIONS	6	12
4. PROGRAMS DROPPED	24	30
TOTAL PROGRAM DOCUMENTS	517	987
5. FOR INFORMATION ONLY	31	48
6. STAFF BRIEFS	3	8
7. STAFF CAMEO STUDIES	1	2
8. JOINT REPORTS	1	1

Exhibit E

MINNESOTA HIGHER EDUCATION COORDINATING COMMISSION
FORMAL PROPOSALS, PENDING OR COMPLETE IN HECC PROGRAM REVIEW PROCESS, BY LEVEL AND BY TYPE OF INSTITUTION, JUNE 18, 1971 THROUGH SEPTEMBER 22, 1972
CURRENT BIENNIUM

Types of Institutions	LEVEL					
	Two Years or Less	Four Years	Master's	Specialist	Doctoral	Total
University of Minnesota.....	12	7	10	2*	2	33
State Colleges	3	13	2	1	—	19
State Junior Colleges.....	28	—	—	—	—	28
Area Vocational-Technical Institutes	131	—	—	—	—	131
Private Colleges	2	3	—	—	—	5
TOTALS	176	23	12	3	2	216

*Includes (Specialist) Cooperative Program for Educational Administrators, at UM/TC and Moorhead State College.

NOTE: Total excludes withdrawn proposals.

Exhibit F

MINNESOTA HIGHER EDUCATION COORDINATING COMMISSION
FORMAL PROPOSALS, PENDING OR COMPLETE IN HECC PROGRAM REVIEW PROCESS, BY LEVEL AND BY TYPE OF INSTITUTION, NOVEMBER, 1969 THROUGH SEPTEMBER 22, 1972

Types of Institutions	Two Years or Less	Four Years	Master's	Specialist	Doctoral	Total
University of Minnesota.....	21	19	24	5*	12	81
State Colleges	7	46	13	5	—	71
State Junior Colleges.....	51	—	—	—	—	51
Area Vocational-Technical Institutes	192	—	—	—	—	192
Private Colleges	2	8**	—	—	—	10
TOTALS	273	73	37	10	12	405

**Four of these were reviewed by the Curriculum Advisory Committee as information documents in accordance with early procedures in program review.

NOTE: Total excludes withdrawn proposals.

CURRENT BIENNIUM

Formal Programs Withdrawn, Tabled, Discontinued, Modified or Conditionally Approved, and Areas Contingent Upon Studies and/or Review (July 1, 1971 to September 22, 1972)

This does not include many minor modifications in titles, curricula suggestions, coordination suggestions and meetings between several kinds of planners.

I. CONDITIONAL

F-455, Associate Degree in Vocational Teacher Education—UM/Duluth (72-6, Page 40)

Note: 72-6 refers to the year and month that program reports were submitted to the Commission.

F-433, B.S. Degree for Trade and Industrial Teachers Vocational Education Major—Winona State College (72-5, page 2)

F-420, A.A. in Vocational Technical Teacher Education — St. Cloud State College (72-5, page 2)

F-473, A.A. Degree in Vocational Education—Bemidji State College (72-5, page 2)

F-478, B.S. Degree in Vocational Education—Bemidji State College (72-5, page 2)

F-476, B.S. Teacher Certificate—Vocational Technical Education—Mankato State College (72-5, page 2)

F-477, A.S. Degree in Vocational Technical Education—Mankato State College (72-5, page 2)

II. FORMAL PROPOSALS WITHDRAWN

F-267, Animal Technician—Pine City AVTI (72-5, page 12)

F-429, Inhalation Therapy Technician—Suburban Hennepin County AVTI (72-2, page 12)

III. DISCONTINUED PROGRAMS

D-4 Disestablished M.A. with Major in International Relations—UM/Twin Cities

D-3 Formal Proposal to Discontinue General College Medical Secretary Program

D-2 Formal Proposal to Discontinue the Landscape Horticulture Program on the University of Minnesota Twin Cities Campus

D-5 M.S. Art Supervision—St. Cloud State College

D-6 M.S. Biology—Bemidji State College

D-7 M.A. Business Administration—Mankato State College

D-8 M.S. Chemistry—Winona State College

D-9 M.S. Economics—Mankato State College

D-10 M.S. Education (Elementary and Secondary Remedial Reading)—Moorhead State College

D-11 M.S. Health, Physical Education—Supervision—St. Cloud State College

D-12 M.A. History—Bemidji State College

D-13 M.A. Music—Mankato State College

D-14 M.S. Music—Mankato State College

D-15 M.S. Music—Supervision—St. Cloud State College

D-16 M.S. Science (General)—St. Cloud State College

D-17 M.S. Physics—Moorhead State College

D-18 M.S. Physics—Winona State College

D-19 M.A. Psychology—St. Cloud State College

D-20 M.S. Social Studies—Winona State College

D-21 M.S. Speech—Moorhead State College

D-22 M.A. Speech—St. Cloud State College

D-23 M.S. Speech—St. Cloud State College

D-24 M.S. Speech—Winona State College

D-25 Painting and Decorating—St. Paul AVTI

D-26 Land Construction Conservation Technician—Winona AVTI

IV. MODIFIED

F-345, Architectural Drafting—Suburban Hennepin AVTI (72-1, page 2)

F-346, Mechanical Drafting—Suburban Hennepin AVTI (72-1, page 2)

F-155, Food Technology—UM/Waseca

V. TABLED

F-357, Hotel, Restaurant Management—UM/Twin Cities (71-10)

F-613, Extracorporeal Pump Technology—North Hennepin S.J.C. (72-8)

F-614, Two Year Legal Assistant Program—North Hennepin S.J.C.

F-496, Sales and Marketing (Retailing)—Jackson AVTI

F-515, Home Furnishing Sales and Management—Jackson AVTI

F-497, Industrial Sales and Management—Jackson AVTI

Program Areas With Coordination Problems Currently Under Study and/or Review

A. Social Work and Human Services

B. Non-Traditional Programs (i.e.—University Without Walls, External Degrees, etc.)

C. Music

D. Allied Health

E. Nursing

Exhibit H

CURRENT BIENNIUM

FORMAL PROGRAMS RECEIVING FAVORABLE REVIEW BY THE HIGHER EDUCATION COORDINATING COMMISSION, JULY, 1971 TO AUGUST, 1972

(includes programs reviewed September 22, 1972)

I. University of Minnesota

*New Institutions

HECC NO.	HECC ACTION DATE	TITLE	LOCATION
313	71-7	(B.G.E.) Bachelor of General Studies-General College	Twin Cities
314	71-7	(B.A.S.) Bachelor of Applied Studies-General College	Twin Cities
323	71-7	(B.E.S.) Bachelor of Elected Studies-College of Liberal Arts	Twin Cities
326	71-7	(M.A.) Physical Therapy (Plan B) Masters Program	Twin Cities
151	71-8 & 9	(A.A.S.) Agricultural Production	Waseca*
152	71-8 & 9	(A.A.S.) Agricultural Industries and Services	Waseca*
153	71-8 & 9	(A.A.S.) Agricultural Business	Waseca*
154	71-8 & 9	(A.A.S.) Horticultural Technology	Waseca*
156	71-8 & 9	(A.A.S.) Home & Family Services	Waseca*
257	71-8 & 9	Latin American Studies	Morris
284A & B	71-8 & 9	(A.A.) Human Services Generalist	Twin Cities
330	71-8 & 9	(M.S.) Medical Microbiology	Mayo
337	71-8 & 9	M.S. with a major in Oral Biology	Twin Cities
338	71-8 & 9	Ph.D. with a major in Oral Biology	Twin Cities
312	71-8 & 9	Animal Technology	Waseca*
331	71-8 & 9	Office Occupations-Medical Secretary	Crookston
332	71-8 & 9	Accounting (Office Occupations)	Crookston
333	71-8 & 9	Office Occupations-Legal Secretary	Crookston
334	71-8 & 9	Office Occupations-Executive Secretary	Crookston
336	71-11 & 12	New Graduate Degree (M.S.) Program in Medical Microbiology	Twin Cities
324	72-2	Two Option Liberal Arts Program	Morris
374	72-2	Specialist Certificate in Library Science	Twin Cities
368	72-2	Ph.D. in Biomedical Engineering Graduate Program	Twin Cities
4	72-2	Department of Chicano Studies College of Liberal Arts	Twin Cities
434	72-2	(Specialist) Cooperative Program for Educational Administrators	Twin Cities & Moorhead State

HECC NO.	HECC ACTION DATE	TITLE	LOCATION
405	72-3 & 4	Redesignate Degree-M.A.P.A. to M.A. with Major in Public Affairs	Twin Cities
358	72-3 & 4	M.A. Program on Family Planning Administration	Twin Cities
495	72-5	Graduate Program in Social Work (M.S.W.)	Duluth
465	72-5	Master of Business Administration (M.B.A.)	Twin Cities
505	72-5	Post-Baccalaureate Professional Development Recognition Program Engineering and Science	Twin Cities
601	72-8	Masters of Education Degree Program	Duluth
580	72-8	Physician's Asst. in Ophthalmology	Twin Cities
555	72-9	Extension Correspondence Minor (Independent Study) in Long-Term Administration-Program Hospital & Health Care Administration.	School of Public Health Twin Cities
		II. Area Vocational Technical Institutes	
178	71-7	Interior Design & Sales	Dakota County*
229	71-7	Graphic Arts	Dakota County*
260	71-7	2nd Year Accounting	Brainerd
304	71-7	Dental Assistant	Moorhead
315	71-7	Dental Assistant	St. Cloud
321	71-7	Child Development Assistant Training Program	916*
322	71-7	Electro-Medical	916*
327	71-7	Construction Mechanical Trades-Pre-Apprentice	Duluth
298	71-8 & 9	Partsman	Wadena
329	71-8 & 9	Hospital Services Coordinator (Ward Secretary)	St. Paul
335	71-8 & 9	Marine & Small Engine	916*
196	71-8 & 9	Horticultural Aide	916*
188	71-8 & 9	Wholesaling & Retailing Marketing (Fashion Merchandising, Food Distribution, Industrial Sales, Partsman)	Hibbing
293	71-8 & 9	Legal Secretary	Winona
299	71-10	Clerk-Stenographer	Suburban Hennepin*
344	71-10	Auto Body & Fender Repairman	Granite Falls
252.1	71-11 & 12	Bank Teller & Clerical Occupations	916*
353	72-1	Modern Wood Technology	Suburban Hennepin*
399	72-1	Central Supply Technician	Suburban Hennepin*
400	72-1	Sheet Metal	Suburban Hennepin*
354	72-1	Carpentry	Suburban Hennepin*
419	72-1	Fashion Merchandising	Dakota County*
356	72-2	Painting & Decorating	Suburban Hennepin*

HECC NO.	HECC ACTION DATE	TITLE	LOCATION
425	72-2	Dental Assistant	Bemidji
426	72-2	Quality Control Technology	916*
199	72-2	Dental Laboratory Technology	916*
200	72-2	Dental Assisting Program	916*
364	72-2	Government & Institutional Accounting	Granite Falls
428	72-2	Industrial Laboratory Technician	916*
430	72-2	Educational Office Occupations	916*
431	72-2	Transportation Office Occupations	916*
195	72-2	Auto Body Repairman	916*
198	72-2	Building Cleaning & Care	916*
206	72-2	Refrigeration & Major Appliance Services & Sales	916*
207	72-2	Building Operating Equipment Maintenance	916*
211	72-2	Purchasing Office Occupation	916*
249	72-2	Construction & Maintenance Metal Trades	Hibbing
251	72-2	Auto Body Repair	Hibbing
350	72-2	Bookkeeping Clerk/General Office	St. Paul
351	72-2	Over-the-Road Truck Driver	Thief River Falls
352	72-2	Water Well Drilling Technology	Staples
457	72-2	Machine Shop (Basic)	Suburban Hennepin*
458	72-2	Graphic Arts	Suburban Hennepin*
196	72-3 & 4	Auto Service Technology	916*
469	72-3 & 4	Auto Service Technology-Service Station Sales & Repair	916*
494	72-3 & 4	Auto Service Technology-Partsman	916*
294	72-3 & 4	Automotive Partsman	Winona
472	72-3 & 4	Motorcycle Mechanic	Hutchinson
208	72-3 & 4	Truck Mechanics	916*
480	72-3 & 4	Heavy Truck & Trailer, Service Mech.	Dakota County*
493	72-3 & 4	Telephone Communications Technician	Dakota County*
483	72-3 & 4	Lineman Electrician	Dakota County*
479	72-3 & 4	Consumer Electronic Products Servicing	Anoka
250	72-3 & 4	Heavy Equipment Repair and Maintenance	Hibbing
481	72-3 & 4	Landscape Technology (Basic Course)	Suburban Hennepin*
485	72-3 & 4	Secretary-Administrative Assistant	Suburban Hennepin*
5A	72-5	Automotive Machinist	Bemidji
348	72-5	Advertising Layout Tech.	St. Cloud
392	72-5	Plastics Technology	Red Wing*

HECC NO.	HECC ACTION DATE	TITLE	LOCATION
395	72-5	Fashion Merchandising	Red Wing*
398	72-5	Television/Radio Announcer	Austin
504	72-5	Technical & Related Office Occupations	916*
412	72-5	Industrial Machinery Mechanic	Red Wing*
453	72-5	Men's Wear Merchandising & Management	Pipestone
506	72-5	Graphic Arts	916*
416	72-5	Recreational Vehicle Repair	Winona
189	72-5	Powdered Metal Technology	Suburban Hennepin*
197	72-5	Mobile & Manufactured Home Repair	916*
275	72-5	Electro-Mechanical Technology	916*
411	72-5	Welding, Combination	Red Wing*
423	72-5	Parts Counterman & Sales	Dakota County*
267	72-5	Animal Technician	Pine City
521	72-6	Accounting	Pipestone
502	72-6	Produce Merchandising	Pipestone
632	72-6	Hardware Marketing & Management	Pipestone
522	72-6	School Food Service Cook Manager	Canby
529	72-6	Sales Association Program	Mankato
552	72-6	Chef Training (2nd Year)	Moorhead
233	72-6	Auto Body Repair	Dakota County*
553	72-6	Automotive Service & Reconditioning	Pipestone
548	72-6	Automotive Jobber Mechanic	Pipestone
526	72-6	Clerical	Pipestone
230	72-6	Meat Processing	Dakota County*
239	72-6	Food Services and Management Training	Dakota County*
551	72-6	Secretarial & Clerical Occupations	Red Wing*
549	72-6	Health Office Occupations	916*
550	72-6	Industrial, Commercial, & Household Aide	Hutchinson
563	72-7	Home Furnishings Merchandising	916*
562	72-7	Industrial Technician	Red Wing*
491	72-6	Pre-Apprentice Painting & Decorating	St. Paul
578	72-7	Advertising & Display Assistant	Wadena
561	72-7	Software Merchandising	916*
557	72-7	Television & Audio-Visual Production Technician	916*
558	72-7	Quantity Food Preparation	916*
559	72-7	Waiter-Waitress	916*

HECC NO.	HECC ACTION DATE	TITLE	LOCATION
560	72-7	Chef Training	916*
212	72-8	Heating & Air Conditioning Equipment, Sales Service and Technology	916*
272	72-8	Environmental Technology	916*
573	72-8	Auto-Light Truck Mechanic	Red Wing*
538	72-8	Auto Body Repairman Refinishing	Suburban Hennepin*
605	72-8	Court Reporting	Jackson
510	72-8	LP Gas Service (Agricultural, Residential and Commercial)	Jackson
596	72-8	Electric Motor Winding & Repair	Jackson
268	72-8	Production Agriculture (Dairy, Cattle and Livestock)	Pine City
592	72-8	Farm Building Construction Coordination	Pine City
492	72-8	Transport Truck Operator	Alexandria
490	72-8	Truck Driver Training	Red Wing*
213	72-8	Cosmetology	916*
209	72-8	Upholstering	916*
603	72-8	Land Construction Conservation Technician	Jackson
409	72-8	Air Conditioning, Heating, and Refrigeration	Red Wing*
180	72-8	Agriculture Supplies Technician	Dakota County*
564	72-8	Building Energy Systems	Suburban Hennepin*
418	72-9	Brick, Block & Tile Masonry	Suburban Hennepin*
610	72-9	Industrial Machinery Mechanic	Pine City
620	72-9	Refrigeration, Air Conditioning & Heating (Basic)	Suburban Hennepin*
625	72-9	Diesel Engine Mechanics	Suburban Hennepin*
572	72-9	Insurance Clerk	Pipestone
349	72-9	Law Enforcement	Hibbing
515	72-9	Home Furnishing Sales and Management	Jackson
499	72-9	Corporate Receptionist	Jackson
629	72-9	Food Service Occupations	Suburban Hennepin*
245	72-9	Apparel Services	916*
569	72-9	Landscape Design Implementation (2nd year option Landscape Technology)	Dakota County*
542	72-9	Commercial Food Occupation (Quantity Cookery)	Suburban Hennepin*
543	72-9	Cook/Chef (Basic) (Hotel-Restaurant Cookery)	Suburban Hennepin*
630	72-9	Kitchen Assistant	Suburban Hennepin*
604	72-9	Television & Radio Repair	Suburban Hennepin*

HECC NO.	HECC ACTION DATE	TITLE	LOCATION
608	72-9	Welding	Suburban Hennepin*
631	72-9	Accounting-Accounting Management	Suburban Hennepin*
497	72-9	Industrial Sales & Management	Jackson
		III. State Colleges	
283	71-7	Bachelor of Science Degree with Major in Social Work	Bemidji
316	71-7	(B.S.) Environmental Studies	Mankato
317	71-7	(B.S.) Teaching Certificate, Environmental Studies	Mankato
318	71-7	(B.A.) "Non-Major"	Moorhead
319	71-7	(B.S.) "Non-Major"	Moorhead
285	71-8 & 9	(B.A.) Creative Studies Program	Winona
328	71-8 & 9	(B.A.) Optional Major in Psychology	Winona
325	71-8 & 9	Minor in Linguistics	Mankato
401	72-1	New Center for Multi-Disciplinary Studies	Moorhead
402	72-1	Specialist in School Administration	St. Cloud
464	72-3 & 4	Major in Anthropology (B.A.)	Moorhead
474	72-6	(A.A.) Library Media Technology	Bemidji
432	72-6	(B.S.) Physical Therapy	Winona
419B	72-6	(B.S.) Photographic Science & Instrumentation	St. Cloud
579	72-8	(M.S.) Instructional Media & Technology	Mankato
583	72-8	(M.S.) Studies in Experimental Education	Mankato
607	72-9	Law Enforcement, B.A. & B.S.	Mankato
590	72-9	Comprehensive Major in Special Education (B.S. Teaching Certificate)	St. Cloud
606	72-9	Peace Studies B.A. & B.S.	Mankato
		IV. Private Colleges	
320	71-7	B.A., Individualized Major Studies	St. Mary's
435	72-2	B.A. in Liberal Arts	St. Benedict
436	72-2	A.A. in Liberal Studies	St. Benedict
437	72-2	B.A. in Individualized Major	St. Benedict
438	72-2	Individualized A.A. Program	St. Benedict
		V. State Junior Colleges	
247	71-7	Practical Nursing	Fergus Falls
286	71-7	Business Management-Accounting	Inver Hills*

HECC NO.	HECC ACTION DATE	TITLE	LOCATION
305	71-7	Air Traffic Control	Anoka-Ramsey
306	71-7	Real Estate	Anoka-Ramsey
307	71-7	Occupation Safety Program	Anoka-Ramsey
308	71-7	Social Worker Assistant	Lakewood
309	71-7	Law Enforcement	Mesabi
310	71-7	Graphic Arts	North Hennepin
311	71-7	Junior Accounting	Rainy River
340	71-8 & 9	Inhalation Therapy Program (Respiratory Therapy Program)	Rochester
341	71-8 & 9	Associate Degree Nursing	Austin
342	71-8 & 9	Engineering Aide Program	Hibbing
343	71-8 & 9	Accounting Technician	Lakewood
339	71-11 & 12	Medical Laboratory Technician	Fergus Falls
361	71-11 & 12	Food Service Management (A.A.)	Riverview*
362	71-11 & 12	Transportation Technology (A.A.)	Fairlakes*
459	72-5	Associate Degree Nursing Program	Normandale
518	72-6	A.D. in Health Care Mid-Management	Inver Hills*
519	72-6	A.D. in Law Enforcement	Inver Hills*
449	72-8	Junior Tax Accountant	Fergus Falls
439	72-8	Educational Services Technology	Fergus Falls
447	72-8	Medical & Legal Secretarial	Fergus Falls
444	72-8	Options to Present D.E. Program	Fergus Falls
565	72-8	Marketing Management	Rainy River
611A & B	72-8	Two-Year Associate Degree Registered Nurse Program	Inver Hills* & Lakewood
612	72-8	Accounting	North Hennepin
624	72-9	Small Engine Mechanic	Rainy River
613	72-9	Extra-Corporeal Pump Technology	North Hennepin

APPENDIX H

PRIVATE COLLEGE CONTRACT REPORT

The tables which follow summarize the payments made to private colleges and universities for new resident students enrolled and grant-in-aid recipients in the fall of 1971 and 1972. Payments were made at the rate of $500 per student for four-year institutions and $400 per student for two-year institutions for both new resident enrollees and grant-in-aid recipients.

SUMMARY OF NEW RESIDENT ENROLLMENTS AND GRANT-IN-AID RECIPIENTS IN PRIVATE COLLEGES AND UNIVERSITIES

	New Resident Enrollments	Grant-in-Aid Recipients
1971	710 (four-year)	216
	140 (two-year)	12
1972	1,485 (four-year)	712 (estimate)
	258 (two-year)	28 (estimate)
Sub-Total Two-Year.....	398	928
Sub-Total Four-Year	2,195	40
GRAND TOTAL.....	2,593	968 (estimate)

SUMMARY OF PAYMENTS UNDER PRIVATE COLLEGE CONTRACT PROGRAM

Institution	1971 New Resident Enrollment	1971 Grant-in-Aid	1972 New Resident Enrollment	1972 Grant-in-Aid*
Augsburg College	$ 0	$ 8,500	$ 0	$
Bethel College	0	4,000	7,000	
Carleton College	9,500		12,000	
Concordia College, Moorhead	37,500	15,000	62,000	
Concordia College, St. Paul	4,000	4,500	4,000	
Golden Valley Lutheran College	35,200	2,800	58,000	
Gustavus Adolphus College	31,000	5,500	45,000	
Hamline University	18,500	5,000	38,000	
Lea College	0	0	0	
Macalester College	0	6,000	0	
Minneapolis College of Art and Design	3,500	2,000	0	
College of St. Benedict	82,500	16,000	162,000	
College of St. Catherine	22,000	3,500	89,500	
St. John's University	7,000	16,000	37,500	
St. Mary's College	20,800	500	10,500	
St. Mary's Junior College	0	2,000	45,200	
St. Olaf College	12,500	500	47,500	
College of St. Scholastica	46,000	8,000	122,000	
College of St. Teresa	0	4,500	0	
College of St. Thomas	51,000	8,500	34,500	
William Mitchell College of Law	30,000	0	71,000	
	$411,000	$112,800	$845,700	$367,200 (estimate)

*Since some grants-in-aid are still being processed, it is impossible to provide specific numbers of grants for each institution.

APPENDIX I

PRIVATE COLLEGE CONTRACT PROGRAM
SUPPORTING DATA

Table 1: Private College Enrollments in Minnesota with Projections Based on Continuation of the Program

Year	Private Two-Year Enrollment	Minnesota Residents Enrolled	Per Cent Minnesota Residents	Private Four-Year Enrollment	Minnesota Residents Enrolled	Per Cent Minnesota Residents	Total Private Enrollment	Minnesota Residents Enrolled	Per Cent Minnesota Residents
1970	1,205	967	80.2	27,282	15,884	58.2	28,487	16,851	59.1
1971	1,313	1,091	83.1	27,099	16,154	59.6	28,412	17,245	60.7
1972	1,445	1,232	85.0	27,598	17,226	62.0	29,043	18,458	63.0
1973	1,459	1,269	87.0	27,874	17,839	64.0	29,333	19,108	65.0
1974	1,474	1,297	88.0	28,152	18,580	66.0	29,626	19,877	67.0

Table 2: Required Fund Transfers Based on Table 1

Year	Two-Year New Residents Enrolled	Fund Transfer Private Two-Year	Four-Year New Residents Enrolled	Fund Transfer Private Four-Year	Total New Residents Enrolled	Fund Transfer Total
1971	140 x $400	$ 56,000	710 x $500	$ 355,000	850	$ 411,000
1972	258 x $400	$103,200	1,485 x $500	$ 742,500	1,743	$ 845,700
1973	302 x $400	$120,800	1,955 x $500	$ 997,500	2,257	$1,118,300
1974	330 x $400	$132,000	2,696 x $500	$1,348,000	3,026	$1,480,000

Table 3: Fund Transfers for Grant-in-Aid Subsidy

Year	Two-Year Grant-in-Aid Enrollees	Fund Transfer	Four-Year Grant-in-Aid Enrollees	Fund Transfer	Total Grant-in-Aid Enrollees	Total Fund Transfer
1971	12 x $400	$ 4,800	216 x $500	$ 108,000	228	$ 112,800
1972	28 x $400	$11,200	712 x $500	$ 356,000	740	$ 367,200
Total Expenditure		$16,000		$ 464,000		$ 480,000
1973	74 x $400	$29,600	2,220 x $500	$1,110,000	2,294	$1,139,600
1974	134 x $400	$53,600	3,617 x $500	$1,808,500	3,751	$1,862,100
Total Requested		$83,200		$2,918,500		$3,001,700

Table 4: Composite Funding — Expenditures and Projections

Year	New Student Contracts	Grant-in-Aid Subsidy	Total Fund Transfer
1971	$ 411,000	$ 112,800	$ 523,800
1972	$ 845,700	$ 367,200	$1,212,900
Total Expenditure	$1,256,700	$ 480,000	$1,736,700
1973	$1,118,300	$1,139,600	$2,257,900
1974	$1,480,000	$1,862,100	$3,342,100
Total Requested	$2,598,300	$3,001,700	$5,600,000

APPENDIX J

MINNESOTA-WISCONSIN RECIPROCITY AGREEMENT — 1973-74

I. General Provisions

A. *Purpose and Nature of the Agreement.* The purpose of this agreement are mutually to continue to improve the post-secondary education advantages of residents of Minnesota and Wisconsin through greater availability and accessibility of post-secondary education opportunities and to achieve improved effectiveness and economy in meeting the post-secondary education needs of Minnesota and Wisconsin residents through cooperative planning and effort by two neighboring states. These purposes will be accomplished through granting students entrance to public post-secondary institutions in the neighboring state according to the same terms, conditions, and fees which govern entrance to those institutions by residents of the state in which the institutions are located. Under this agreement, Minnesota residents are afforded the opportunity to attend public institutions in Wisconsin on the same basis that Wisconsin residents attend these institutions; and Wisconsin residents are afforded the opportunity to attend public institutions in Minnesota on the same basis that Minnesota residents attend these institutions.

B. *Duration of the Agreement.* This agreement is to be effective at the beginning of the 1973 summer session of the institutions involved. The agreement will be reviewed annually and may be modified at any time upon mutual agreement of both parties to the agreement representing their respective states. The agreement may be rescinded upon written notice by either party to the agreement to the other party of the agreement prior to January 15 preceding the academic term for which the agreement will no longer be continued. The terms of the agreement may be reopened for negotiation by either party should non-resident tuition be found unconstitutional by the courts in either state.

C. *Scope of the Agreement — Students.* All persons who qualify as residents of Minnesota and Wisconsin for purposes of higher education under laws and regulations of the state of residence may be eligible to attend a public vocational school or a public collegiate institution as an undergraduate student in the neighboring state under this agreement.

D. *Scope of the Agreement — Institutions.* All public vocational schools and collegiate institutions of higher education in Minnesota and Wisconsin are included under this agreement and are available to residents of the neighboring state in accordance with terms of this agreement.

II. Undergraduate Collegiate Education

A. *Plan for Undergraduate Students Under the Agreement.* Under this agreement, Minnesota residents are eligible to attend public collegiate institutions in Wisconsin as undergraduate students on the same basis for admission and tuition purposes that Wisconsin residents may attend the same institution. Similarly, Wisconsin residents are eligible to attend public collegiate institutions in Minnesota as undergraduate students on the same basis for admission and tuition purposes that Minnesota residents attend these institutions. The Minnesota resident attending a Wisconsin institution is required to meet those admission and performance requirements which are applicable to Wisconsin residents.

Wisconsin residents attending Minnesota institutions are required to meet those admission and performance requirements which are applicable to Minnesota residents. Those charges for tuition and fees which apply to Minnesota residents attending Minnesota institutions will be applied to Wisconsin residents attending Minnesota instituitions under the agreement. Those charges for tuition and fees which apply to Wisconsin residents attending Wisconsin institutions will be applied to Minnesota residents who attend Wisconsin institutions under this agreement.

B. *Student Applications.* In order to attend a collegiate institution in the neighboring state under this agreement, an undergraduate student must submit an application to the agency responsible for administration of this agreement in the person's home state. The administering agency will be responsible for determining the eligibility of the applicant as a resident of the state, for approving the application, and for transmitting the application to the administering agency in the neighboring state.

C. *Magnitude of the Plan.* The intent of this agreement is to provide for an equal number of undergraduate collegiate students crossing the border in each direction. In order to accomplish this intent to the fullest extent feasible,

each state will approve and transmit to the neighboring state applications from students who wish to attend institutions in the neighboring state under this agreement. Initially each state will accept 500 students or the number of eligible continuing students, whichever is larger, under the agreement. Additions to the initial quota will be approved on a matching basis in increments to be mutually agreed upon at such time as both states have received applications in addition to the initial quota. In the event that the number of applicants exceeds the number of spaces available to either state under this agreement, the sending state shall determine which students, or categories of students, should be included under the agreement in accordance with priorities determined by the sending state. However, in the event that application of the sending state's priorities to the total pool of applicants should yield more students who rank equally than can be accommodated under the agreement, the sending state may approve and transmit more applications than the number of spaces available and the institutions in the receiving state may make the final selection of students to be included under the agreement.

D. *Institutional Quotas.* In order to provide for appropriate distribution of students attending institutions in the neighboring state under this agreement and to facilitate planning for accommodating students under this agreement, each of the two states may establish institutional quotas which prescribe the maximum number of students to be accommodated under this agreement at each individual institution. The sum of all institutional quotas must not be less than the total number of students to be accommodated in the state under the agreement and may exceed the total number to be accommodated under the agreement. In the event that the sum of all institutional quotas in a state should exceed the total number to be accommodated in all institutions in the state, the maximum to be accommodated in all institutions in the state shall limit the total number of students and the quota for an institution shall limit the number to be accommodated in that particular institution. As an alternative to institutional quotas, either state may specify that the number to be accommodated in an individual institution may not exceed a certain percentage of the total number to be accommodated in the state.

III. Graduate Collegiate Education

A. The parties to this agreement agree to enter into discussions relative to ways in which this agreement may be expanded to include graduate and post-baccalaureate professional students.

IV. Vocational School Education

A. *Plan for Vocational Students Under the Agreement.* Students attending a vocational school in the neighboring state will be reimbursed for non-resident tuition by the student's home school district. In accordance with this procedure, a Minnesota resident may attend a public area vocational-technical school in Wisconsin at the same cost for tuition and fees as the cost to a Wisconsin resident, and a Wisconsin resident may attend a public area vocational-technical school in Minnesota at the same cost for tuition and fees as the cost to a Minnesota resident attending the same institution.

B. *Student Applications.* In order to attend a public area vocational-technical school in the neighboring state under this agreement, a student must apply to the director of the nearest public area vocational-technical school in the student's state of residence. The director will secure the necessary approval from the State Department of Education in Minnesota and the State Board of Vocational, Technical and Adult Education in Wisconsin. Approval to be subject to state policies for out-of-district tuition responsibilities.

C. *Magnitude of the Plan.* The intent of this agreement is to provide the opportunity for every student who wishes to attend a public area vocational-technical school in the neighboring state under this agreement to do so. Accordingly, the number of eligible students to be accommodated under this agreement will be limited only by (1) the availability of funds for reimbursement of tuition and (2) the capacity of the specific program which the student seeks to enter.

D. *Institutional Quotas.* No quotas for students attending public area vocational-technical schools under this agreement will be established. However, the opportunity to enter a public area vocational-technical school in the neighboring state will be dependent on the availability of space in the particular program which the student seeks to enter. A student whose application is approved in his state of residence will be accommodated in a public area vocational-technical school in the neighboring state if he meets those admission requirements which are applied to residents of the neighboring state and if space is available in the program which the student seeks to enter.

APPENDIX K

FEDERAL INTEREST GRANTS PROGRAM REPORT (TITLE VII, PART C, SECTION 745, PUBLIC LAW 92-318)

Under the federal interest subsidy program, annual grants (or interest subsidies) are awarded to institutions of higher education and higher education building agencies to reduce the cost of borrowing funds for construction, rehabilitation, and improvement of academic facilities.

As the designated agency for the administration of this program, the Higher Education Coordinating Commission reviews, validates and comments on the applications for grants according to HEW regulations in the areas of space utilization, enrollment projections, and project development relationship to statewide and regional plans.

Funding for this program has increased in recent years and the Education Amendments of 1972, as passed by Congress and signed by the President, extend authorization for the program. A congressional continuing resolution will provide funding support for applications on file while actual appropriations have been delayed until the opening of the new session of Congress in January 1973.

Interest grants awarded during the 1971-1973 biennium:

Institution	Project Amount	Annual Interest Grant
College of St. Benedict	$ 465,700	$ 8,962
College of St. Benedict	$ 216,100	$ 4,518
Fairlakes State Junior College	$2,278,716	$17,344
Mankato State College	$3,428,000	$26,096
Minneapolis College of Art and Design	$6,635,183	$72,592
Riverview State Junior College	$2,078,636	$15,821
Southwest Minnesota State College	$2,115,400	$21,750
University of Minnesota, Duluth	$2,692,940	$ 4,004
University of Minnesota, Duluth	$3,500,000	$40,739
University of Minnesota, Morris	$1,680,000	$19,554
University of Minnesota, Morris	$1,150,000	$13,378

Institutions with applications filed with HEW as of September 1972 included:

Institution	Project Amount	Annual Interest Grant
University of Minnesota, Duluth	$ 1,375,000	Pending
University of Minnesota, St. Paul	$10,000,000	Pending
Anoka-Ramsey State Junior College	$ 1,469,000	Pending
Inver Hills State Junior College	$ 890,000	Pending
Lakewood State Junior College	$ 968,000	Pending
North Hennepin State Junior College	$ 1,114,000	Pending
Rochester State Junior College	$ 1,005,505	Pending

APPENDIX L

FEDERAL UNDERGRADUATE INSTRUCTIONAL EQUIPMENT PROGRAM REPORT
(TITLE VII, PART F, PUBLIC LAW 92-318)

The Instructional Equipment Program is designed to assist in improving undergraduate instruction by providing grants for the acquisition of equipment to be used in the instructional process. Grants are awarded for either (1) laboratory and other special equipment, or (2) television equipment for closed-circuit direct instruction.

As the agency designated for the administration of this program, the Higher Education Coordinating Commission reviews, validates and ranks applications for grants according to the state plan and HEW regulations. The U. S. Office of Education approves the state plan adopted by the Commission and awards grants based on the Commission's recommendations.

Since inception of the program, more than one million dollars have been awarded to 41 Minnesota colleges and universities. The result has been substantial improvement in the quantity and quality of instructional equipment for use in teaching undergraduate students in Minnesota.

In recent years funding for this program has been relatively stable with a slight decrease noticeable in the last biennium. The Education Amendments of 1972 provide for the extension of authorization of the program, however, appropriations have been delayed until the opening of the new session of Congress in January 1973.

Grants awarded during the 1971-1973 biennium for Instructional Equipment Improvements:

Institution	Laboratory Equipment Grant
University of Minnesota, Twin Cities	$10,000
University of Minnesota, Duluth	8,607
University of Minnesota, Duluth	5,162*
University of Minnesota, Duluth	5,600
University of Minnesota, Morris	9,504
University of Minnesota, Morris	6,168
University of Minnesota, Crookston	9,974
University of Minnesota, Waseca	10,000
Bemidji State College	10,000
St. Cloud State College	10,000
St. Cloud State College	5,998*
Winona State College	9,968
Winona State College	5,381
Anoka-Ramsey State Junior College	10,000
Anoka-Ramsey State Junior College	10,000*
Lakewood State Junior College	10,000
North Hennepin State Junior College	9,886
Rochester State Junior College	10,000
Willmar State Junior College	6,596
Augsburg College	9,845
Augsburg College	8,201*
Bethel College	9,803
Gustavus Adolphus College	7,888
Minneapolis College of Art and Design	9,925
College of St. Benedict	6,330
College of St. Catherine	6,804
St. John's University	976
St. Mary's College	3,475
St. Olaf College	10,000
St. Olaf College	2,800*
College of St. Teresa	4,412
College of St. Thomas (2)	10,000
College of St. Thomas (1)	9,992
St. Mary's Junior College	4,711

*Indicates close-circuit television grants; all others are laboratory and special equipment grants.

APPENDIX M

FEDERAL ACADEMIC FACILITIES PROGRAM (TITLE VII, PART A, PUBLIC LAW 92-318)

Nearly 40 million dollars in federal funds have been made available for expanding and improving physical facilities of colleges and universities in Minnesota since inception of the academic facilities program. These funds have been awarded as matching grants to assist in financing the construction, acquisition, or rehabilitation of classrooms, laboratories, libraries, and related facilities. Under program requirements, construction of such facilities, either alone or together with other construction to be undertaken within a reasonable time, must result in a substantial expansion or creation of urgently needed (1) student enrollment capacity, (2) the capacity to provide health care for students and institutional personnel, or (3) capacity to carry out extension and continuing education programs on campus.

As the agency responsible for the administration of this program, the Higher Education Coordinating Commission has been actively involved in assisting institutions of post-secondary education in Minnesota to obtain support for academic facilities construction. Applications for grants in the program are reviewed, validated and ranked in priority order according to the state plan and HEW regulations in the categories of enrollment needs, space needs, and availability of matching financial support. As the applications and recommendations are forwarded to HEW, the Commission serves as an advocate for the review and action process in Washington. Whenever possible, the Commission also attempts to assist institutions in obtaining necessary matching funds or alternate funding if federal funds are either unavailable or not applicable.

During the past several years, funds for the program have been decreasing. However, the Education Amendments of 1972, as passed by Congress and signed by the President, extended authorization for the program. Appropriations for this and other post-secondary programs have been delayed until the opening of the new session of Congress in January 1973.

Projects funded during the 1971-1973 biennium:

Institution	Project	Federal Grant
College of St. Benedict	Physical Education Building Addition	$155,000
Hamline University	Partial Classroom Building (New) and Conversion of Old Library	$189,414
College of St. Benedict	Home Economics Renovation	$ 62,370
University of Minnesota, Waseca	Learning Resources Center	$228,533
Minneapolis College of Art and Design	New Technical and Academic Facilities	$288,776

Historical summary of facilities construction grants:

(1) Library, fine arts, science, or classroom facilities at Bemidji, Mankato, Moorhead, St. Cloud, Southwest and Winona State Colleges.

(2) Classroom, science, performing arts, and library facilities at University of Minnesota (Twin Cities, Duluth, Morris, and Waseca campuses).

(3) Classroom, activities, fine arts, academic, and library facilities at Austin, Anoka-Ramsey, Brainerd, Fergus Falls, Itasca, Hibbing, Mesabi, Lakewood, Normandale, North Hennepin, Rainy River, Rochester, Willmar, and Worthington State Junior Colleges.

(4) Classroom, science, fine arts, library, and physical education facilities at the following private colleges: Bethany Lutheran College, Concordia College, College of St. Benedict, College of St. Catherine, College of St. Teresa, College of St. Scholastica, College of St. Thomas, St. John's University, Gustavus Adolphus College, Hamline University, and St. Olaf College.

APPENDIX N

INTER-INSTITUTIONAL INSTRUCTIONAL TELEVISION PROGRAM REPORT

INTER-INSTITUTIONAL TELEVISION PROGRAM

In Part Three, Section XII, recommendations are made for the continuation of the Inter-Institutional Television Program to foster expansion and improvement in the use of television in post-secondary education. In the following paragraphs, additional background is provided in relation to the development of television centers and instructional materials. A listing of grants made for instructional materials development during the last biennium is also appended.

DEVELOPMENT OF TELEVISION CENTERS

There are two kinds of television centers, regional production centers, and experimental classroom centers. To carry on in the concept of providing services, the initial centers have provided extensive dubbing and editing services to other institutions in the preparation of their instructional TV materials. One center has compiled a listing of all materials produced by the development portion of the state project and has distributed it statewide. Each center handles considerable requests for information concerning the use of instructional TV. In fact, a large portion of the total effort is given to these consultative services to institutions and agencies. Workshops, seminars, formal classwork and work experiences for students in the television arts account for a large part of the services offered by a regional center.

As the state project moves into yet another new year, the role of the regional centers appears to be taking on a new dimension. The regional centers have stimulated other institutions to become involved in the materials development program. The sophistication of the production process has steadily grown. A trend towards specialization indicates needs for further sophistication at the regional centers. As the library of materials grows larger, so grows the dubbing and distribution operation. Faculty who have experienced the process of preparing high quality ITV materials are now seeking the vast potential of moving out of the classroom with film and remote TV gear to add new dimensions to their instruction. Specialized regional centers are beginning to provide this sophistication in the production process. A fully equipped remote facility at one production center provides unlimited access in this type of project. Color has become a very important consideration, but continues to move beyond available financial resources of most institutions. One center is now equipped for color. Efforts are now being made for other institutions to "shoot" programs at the color facility.

Regional centers serve first their regional areas, but because only three centers exist, they also have to endeavor to serve statewide needs. Associations between centers, institutions, even state agencies know no bounds. Projects are being developed by consortia of institutions located throughout the state, and in some instances several centers cooperate on a single production.

Each regional center has two studios, interconnected for production, taping, viewing, and evaluating, or for conducting several functions simultaneously. A major studio is equipped with background sets and controlled lighting; the cameras are mounted on professional pedestal/dollies and have either zoom or fixed lenses. Housed in the master control room are electronic support systems, audio control consoles, multiplexers, and video switchers. Video tape machines are available for recording, playback and editing.

Should other institutions wish to use the facilities, the staff of the regional center provides assistance with all elements of production, from the initial planning stages through the final taping. Preparation of visuals used in television production may be scheduled in association with the resident institution's audio-visual/graphic arts department.

The experimental classroom centers at the Bemidji, St. Cloud and Southwest State Colleges and on the Duluth, Morris and Twin City campuses of the University have as a major function to determine how television can best be used on an intra-institutional basis. These centers have aided in the initiation production of some inter-institutional work. These centers also serve as a laboratory in which students may become familiar with the use and care of equipment and the production of television lessons. Further, they provide nearby institutions the opportunity to observe ways in which television can be used for instructional purposes.

Since the equipment is intended for use in all departments of an institution, ease of movement is of prime importance. Thus, the cameras are portable, and the provision of wheeled-carts facilitates the moving of video tape record-playback units and receiving monitors.

INSTRUCTIONAL MATERIALS DEVELOPMENT

Instructional materials development is designed to encourage the sharing of existing resources by the use of inter-institutional television. Specifically this is accomplished by increasing the use of existing quality T.V. materials, by increasing faculty knowledge about T.V. capability, by increasing faculty skill in the use of T.V. for instruction, and by increasing cooperation among institutions. The foregoing efforts are the inputs toward accomplishing the major goals of the inter-institutional statewide television program of improved instructional effectiveness and efficiency.

To accomplish the goals of television program development, six objectives were established: (1) to increase the number of cooperating faculty members from different institutions, (2) to increase the resources available to students, (3) to increase the use of high quality instructional resources, (4) to increase the use of television for instruction in areas it can best be used: i.e., image magnification, (5) to increase the number of faculty using television for the first time and (6) to increase the number of prepared programs receiving multiple use.

Guidelines reflecting the goals and objectives of the program were developed for use by institutions interested in applying to the Higher Education Coordinating Commission for television program materials support grants. Grants were made to cover the cost of faculty travel, expendable items used during production such as video tape, photographic film and paper. Also included was a reasonable cost for cameramen, arts and graphic work, sets, and special announcers.

Before projects were accepted as eligible for grants, they needed to meet the following four criteria: (1) designed to enrich or improve instruction, (2) be developed and usable by more than one institution, (3) have an evaluation mechanism as a part of it, and (4) be considered of sufficient educational value to justify its expenditure. To aid in making these determinations, an advisory committee of persons working in the television materials production area is selected to review the projects. Competition for the available funds has become increasingly keen and has resulted in the refinement of guidelines and improvement of proposed projects.

In the judgment of the Inter-Institutional Television Coordinators Committee following considerable experience and operation at the respective centers, the inter-institutional television program represents:

1. The only vehicle and catalyst for statewide cooperation serving all segments of post-secondary education.
2. A unique opportunity for faculty members from different institutions to get together and realize mutual sharing of ideas and to develop creative methods of instruction.
3. New learning opportunities and experiences are afforded to students. Instructional television can bring into the classroom outside resource personnel, innovative experiences such as an inside view of a therapy session between a psychiatric nurse and patient, a comprehensive view of the operation of a center for gifted children, an over-the-shoulder view of discussions with top business executives, an on-site living experience on an Indian Reservation, and many others.
4. Considerable progress in the production and delivery of development programs has been made since the inception of this overall program, thereby infusing new dimensions and improvement in instruction and learning at post-secondary educational institutions throughout our state.

LIST OF TELEVISION INSTRUCTIONAL MATERIALS DEVELOPMENT GRANTS (From 1971 to Fall 1972)

The following list identifies grants made since the 1971 report. It should be noted that once a grant is made, processing of awards and the production process may require several months to sometimes over a year before a program is complete, and ready for classroom utilization:

Project	Grant	Applying Institution
Basic Engineering and Physics Video Tape Modules	$ 5,749.00	University of Minnesota, Minneapolis
Phonics and Work Analysis	4,718.20	Bemidji State College
Bridging the Gap Between Studio Work and Secondary Teaching in Art	8,353.70	Bemidji State College
General Education and Science Planning	844.50	Mankato State College
Materials on Giftedness	2,148.80	Mankato State College
Business Management	2,777.50	Mankato State College
Distributive Education	4,573.60	Mankato State College

Project	Grant	Applying Institution
Working with the Mentally Retarded	15,366.20	Moorhead State College
Environmental Quality Education in the Lake Agassiz Region	22,405.40	Moorhead State College
Piaget's Developmental Theory: Conservation Concepts	2,241.00	Bemidji State College
Development of Teaching Behavior Models	2,952.60	Bemidji State College
Glassworking	2,611.60	St. Cloud State College
Business Education: Data Processing	1,865.40	Winona State College
Industrial Education	5,489.20	Winona State College
Piaget's Conservation Theory	400.00	Bemidji State College
Behavior Teaching Models	500.00	Bemidji State College
Basic Fundamentals of Ice Skating	6,621.70	Bemidji State College
Art Experiences at the Elementary Level	4,025.25	Mankato State College
Materials Production Consultant	15,000.00	Mankato State College
Distributive Education-Management Development	4,350.80	Moorhead State College
Area Production Consultant	15,000.00	Moorhead State College
Fundamentals of Solid State Electronics	5,570.65	St. Cloud State College
Psychological Phenomena	10,475.29	Southwest Minnesota State College
Basic Program: Health Education	6,502.31	Southwest Minnesota State College
Business Education: Data Processing	290.00	Winona State College
Industrial Education	1,264.00	Winona State College
Consultant in Television Materials Production	15,000.00	Winona State College
Development of Video Self-Instructional Materials	2,313.50	Univ. of Minn., Morris
Senior Electronics Technician	802.00	Bemidji State College
Ampex Video-Tape Equipment Repair	870.00	Mankato State College
Home Economics: Food Processing	1,278.70	Mankato State College
Use of Instructional Television in Public School Programs in Minnesota	1,437.18	Mankato State College
Maternal Nursing	2,043.10	Mankato State College
Laboratory Experiences	2,468.86	Mankato State College
Plants and Human Affairs	3,127.16	Mankato State College
Environmental Quality Education in the Lake Agassiz Region	4,234.80	Moorhead State College
Working with the Mentally Retarded	1,437.40	Moorhead State College
Television Production Equipment Maintenance	1,163.00	St. Cloud State College
Medieval Manuscript Art	3,347.10	St. Cloud State College
Red Lake Indian Reservation	3,443.55	St. Cloud State College
Indian Life in Southwestern Minnesota	395.00	Southwest Minnesota State College
Media Maintenance Training (Television Production Equipment Maintenance)	909.00	Winona State College

Project	Grant	Applying Institution
Introduction to Macrame	1,083.32	Winona State College
Administration of the Open School System	1,280.72	Winona State College
"Styles in Consort"—Basic Artistic Elements of Music, Drama, and Dance	1,296.68	Winona State College
Juvenile Offenders	2,223.77	Winona State College
Innovative Programs in Minnesota Elementary Education	2,371.70	Winona State College
Regional Computer Center	1,101.12	Mankato State College
Adult Basic Education	1,462.36	Mankato State College
Northwestern Minnesota: Problems, Resources, and the Future	1,000.00*	Moorhead State College
Environmental Quality Education in the Lake Agassiz Region	1,247.37	Moorhead State College
Working with Social Services	1,000.00*	Moorhead State College
Communicating About Computers to the Educators	1,000.00*	Moorhead State College
Maintenance of Video-Tape Recorders	527.50	Southwest Minnesota State College
Development of Video-Tape Presentations in the Basic Program, Health Education	1,450.00	Southwest Minnesota State College
Camera Techniques	1,000.00	Winona State College
Color Television Production Equipment Maintenance	1,527.00	Winona State College
Preparation of Teaching Materials	6,262.70	Bemidji State College
Summer Production Personnel Support	3,500.00	Mankato State College
Resident Consultant	15,000.00	Mankato State College
Communicating About Computers to the Educators	6,236.00	Moorhead State College
Working with Social Services	6,810.00	Moorhead State College
Resident Consultant	15,000.00	Moorhead State College
Solid State Electronics	742.50	St. Cloud State College
Red Lake Indian Reservation	1,572.58	St. Cloud State College
Speech Communication	5,316.40	St. Cloud State College
Maintenance of Video-Tape Recorders	873.00	Southwest Minnesota State College
Earth Science: Rocks and Landforms of Southeastern Minnesota	3,151.10	Winona State College
Supplement to: "Regional Television Consultant Service" (Graphic Artist)	5,000.00	Winona State College
Regional Television Center Consultant Services	15,000.00	Winona State College
Political Science: Instructional Analysis	1,668.00	Mankato State College
Northwestern Minnesota: Problems, Resources, and the Future	7,335.00	Moorhead State College
Video Cassette and Video Tape Presentations in the Speech Program	7,197.36	Southwest Minnesota State College
Creativity through Music	2,529.48	Winona State College

*Granted $1,000.00 for planning among three projects.

APPENDIX O

MINITEX REPORT

The list of libraries and institutions which follows shows the history of involvement in the interlibrary exchange program and represents the status of the participation to date.

HISTORY OF MINITEX USAGE

January 1969	Bemidji State College	
	Duluth Public Library (Arrowhead Regional Library)	
	Mankato State College	
	Rochester State Junior College	
	Rochester Public Library	
	Southwest Minnesota State College	
	St. Cloud State College	
	St. John's University	
	St. Mary's College	
	University of Minnesota, Duluth	
	University of Minnesota, Morris	
January 1970	Winona State College	(Shared St. Mary's TWX)
	College of St. Teresa	(Shared St. Mary's TWX)
	St. Olaf College	(Used own TWX equipment)
	Carleton College	(Used own TWX equipment)
January 1971	Moorhead State College	
	Winona State College	
July 1971	Gustavus Adolphus College	
	College of St. Scholastica	
	Carleton College	
	St. Olaf College	
	College of St. Teresa	
	Winona Public Library	(Used Winona State College TWX)
	Concordia College	(Moorhead)
October 1971	Augsburg College	
	Bethel College	
	Concordia College	(St. Paul)
	Hamline University	(CLIC)
	James J. Hill Reference Library	
	Macalester College	
	College of St. Catherine	
	College of St. Thomas	

November 1971	East Central Regional Library	(Cambridge)
	Great River Regional Library	(St. Cloud)
	Lake Agassiz Regional Library	(Moorhead)
	Minnesota Valley Regional Library	(Mankato)
	Nobles County Library	(Worthington)
	Northwest Regional Library	(Thief River Falls)
	State Library Division	(St. Paul)
	Northland State Junior College	
	Worthington State Junior College	
January 1972	University of Minnesota, Crookston	
	University of Minnesota, Waseca	
	Normandale State Junior College	
	Mesabi State Junior College	
	Austin State Junior College	
	Crow River Regional Library	(Willmar)
June 1972	Brainerd State Junior College	
	Fergus Falls State Junior College	
	Hibbing State Junior College	
	Itasca State Junior College	(Grand Rapids)
	Northland State Junior College	(Thief River Falls)
	Rainy River State Junior College	(International Falls)
	Vermilion State Junior College	
	Willmar State Junior College	
	Anoka County Library	
	Dakota County Library System	
	Hennepin County Library	
	Minneapolis Public Library	
	Scott County Library System	(MELSA)
	St. Paul Public Library	
	Ramsey County Public Library	

APPENDIX P

CRIMINAL JUSTICE RESEARCH FELLOWSHIP PROGRAM REPORT

The Criminal Justice Fellowship Program was initiated by the Higher Education Coordinating Commission in cooperation with the Governor's Commission on Crime Prevention and Control for the 1972-73 academic year. The major purpose of the program is to provide additional data to the existing research base in crime prevention, law enforcement, and/or delinquency through fostering such graduate research in Minnesota colleges and universities. Research fellows devise their own instruments for data collection, analyze and interpret their data and provide a copy of the final report resulting from their individual research projects to both the Governor's Crime Commission and the Minnesota Higher Education Coordinating Commission.

A second goal of the program is to familiarize an increasing number of graduate students with the literature and problems associated with criminal justice research, thereby increasing interest in this area. For example, while individual projects are in progress, three seminars are held with the fellowship recipients, members of the Governor's Crime Commission, the project director who is a member of the staff of the Higher Education Coordinating Commission and interested experts in the criminal justice field during the fall, winter, and spring quarters of the academic year. The seminars provide an opportunity for each criminal justice fellow to share and assess his progress and problems in conducting his research with his own peers as well as benefit from dialogue with those already working in the criminal justice system. The seminars also provide the staff with an opportunity to assess the progress of the research fellow in completing his project. While not eligible for the fellowship program themselves, the graduate faculties provide a vital link in the Criminal Justice Research Fellowship Program by encouraging able students to enter the fellowship competition and later by directing graduate students in their research projects.

As a result of the initial request for grant funds, the Criminal Justice Research Fellowship Program provides seven research fellowships of $3,000 each to qualified graduate students in disciplines related to criminal justice studies. Graduate students enrolled full-time in both Minnesota's private and public institutions of higher education are eligible to apply. The Criminal Justice Research Fellowship Program received $18,750 from federal funds under the Omnibus Crime Control and Safe Streets Act of 1968 (P. L. 90-351), and $6,250 in matching funds from the Governor's Crime Commission. The total funds administered under the fellowship program are $25,000.

The projects that were awarded are listed below:

Marshall Dermer University of Minnesota

Do (SEDERM) Socio-Economically Disadvantaged, Ethno-Racial Minorities Receive Fair Jury Trials?

The Sixth Amendment provides for "trial by an impartial jury" and the Fourteenth Amendment guarantees "equal protection of the laws." Certain social psychological formulations suggest that present judicial practices may result in trials which are in violation of the United States Constitution. The present study is designed to determine if existing jury trials in fact deny the socio-economically disadvantaged, and ethno-racial minorities (SEDERM) defendants fair trials. This study will specifically examine the juror selection process of the Hennepin County courts in relation to SEDERM and how adequately members of SEDERM are represented on jury panels.

Peggy C. Giordano University of Minnesota

Effectiveness of Organizations in the Juvenile Justice System: A Client Perspective

The purpose of this project is to examine the effectiveness of major organizations dealing with problem juveniles in the Hennepin County area using problem juveniles as the informational source. Although intended as an independent project, it will complement other studies being done at the University of Minnesota on the same organizations, only from different perspectives.

Pamela A. Lanoue University of Minnesota

Women's Role in the Administration of Criminal Justice

The purpose of this project is to determine the extent to which women are presently being denied employment in the law enforcement field; the career possibilities for women in police organizations; and the specific barriers to employment from a legal, administrative and attitudinal perspective.

R. Christopher Perry University of Minnesota

Attitudes of the Accused: Dimensions

The purpose of this study is to investigate and identify differences in the pre- and post-trial perceptions of the accused in order to determine how the process affects him.

William M. Rhodes University of Minnesota

Economic Analysis of Plea Bargaining

An economic analysis of plea bargaining is intended to give an insight into two simultaneous processes.

The first process is the decision of the prosecutor to either take a case to court or accept a guilty plea with a reduced charge. The second process is the decision of the defendant to either accept the prosecutor's offer of a bargain, or to force the issue to be decided by a bench or jury trial. It will be shown in this project that these decisions can be partially explained using standard economic theory. That is, the prosecutor's and the defendant's choice either to go to trial or to plea bargain is a problem involving the rational allocation of scarce resources to competing uses. The purpose of this analysis is to determine how the interaction between the above two decision-makers determine the number of criminal cases decided by trial rather than by a guilty plea, and the severity and distribution of sentences which the guilty receive. Moreover, this analysis is intended to illustrate how the reallocation of resources within the judicial system will alter the flow of cases through the system.

Rick L. Sloan Mankato State College

Bail: Stigmatization and Alienation

The purpose of this project is to explore stigmatization (imposed upon an individual by other individuals or social groups) and alienation (an individual's feeling of noninvolvement in and enstrangement from his society and culture) due to detention and to determine how stigmatization and alienation are affected by different bail procedures. Particular emphasis will be placed on identifying differences that occur by race.

John W. Townsend University of Minnesota

Group Homes: A Closer Look

The concept of group homes has become an integral part of the spectrum of community care for dependent and delinquent youths especially by justice, corrections and welfare officials in the metropolitan area. Only limited data is available on the actual effects of the group home experience on its residents. The specific objectives of this study are: (1) to promote the coordination and cooperation of the variety of agencies involved in the group home enterprise, provide opportunities for mutual feedback processes to develop and initiate the employment of a consistent system of record keeping on juveniles across group home programs; (2) to assess the attitudes of those closely associated with the group home enterprise toward the general group home environment, diagnostic and placement practices, treatment methods and community involvement; and (3) to conduct a systematic follow-up on a sample of juveniles after their discharge from the group home facility to appraise their adjustment to the community. Included in this effort will be a report on the difficulties of interpreting the findings of such post-hoc treatment analyses.

APPENDIX Q

COMMUNITY SERVICE AND CONTINUING EDUCATION REPORT

In 1965, the Congress, recognizing the need for means through which the resources of higher education might be addressed to the growing problems of society, enacted Title I of the Higher Education Act of 1965.

Designed to provide "grants and contracts . . . to strengthen continuing education and extension methods and teaching and public service resources of colleges and universities," Title I HEA has been the catalyst that has encouraged Minnesota institutions of higher education into working partnerships with others in the broadest of attacks on community problems. Consortia has been developed and channels of communication opened between communities and higher education institutions. The formation of these essential linkages between community and faculty may be vital to efforts in facing community and institutional challenges in the future.

The results in Minnesota have been impressive. Through careful planning and coordination and a judicious use of limited matching funds, the approximately $175,000 in federal funds made available to the state in each of the seven years has enabled 19 institutions, including junior colleges, area vocational-technical institutes, state colleges, private colleges and the university to mount 73 community service programs of major importance. The impact of these programs extends far beyond the immediate results achieved. Of greatest significance has been the development of institutional ability to respond to needs articulated by the community. The increased competence and heightened awareness of the viable rate of the campus in identifying and ameliorating community problems are significant products of the experience with Title I projects in Minnesota.

The following community service projects were funded in 1971-72 under Title I HEA of 1965:

1971

A Diversified Recreation Program for Inner City Youth

AUGSBURG COLLEGE, Minneapolis, Minnesota 55404

Program Director: Howard Pearson, Associate Professor, Health and Physical Education, Augsburg College, 332-5181, Ext. 582

A diversified summer recreation program at Augsburg College promotes: (1) constructive use of leisure time for 150 inner-city boys and girls ages 8-13 (two groups of 75, each for a three-week period); and, (2) provides an opportunity for 14-16 year old inner-city youths with leadership potential to work in a program where this potential is developed. What to do with one's leisure time is an immense problem for the inner-city. This problem will never be solved without programs which supply indigenous leadership for the various schools, playgrounds and agencies of the inner-city. This program is producing this type of indigenous leadership needed by recruiting junior assistants with leadership potential from various areas of the inner-city. These junior leaders help supervise the three groups of 25 boys and girls. They are placed under Augsburg College students in either art, drama, music or physical education, according to their demonstrated abilities. The college students are those majoring in art, drama, music and physical education and are selected because of their interest in teaching or working in the inner-city and developing this ability with a practical seven week experience.

Institution Contribution:	$19,580
Federal Contribution:	5,000
Total Project Budget:	$24,580

Urban Curriculum Development in Community Planning for Model City Residents and College Students

AUGSBURG COLLEGE — HIGHER EDUCATION CONSORTIUM FOR URBAN AFFAIRS, INC.

Program Director: Robert W. Clyde, Ph.D., Director of Social Science Research Center, Augsburg College, Minneapolis, Minnesota 55404 332-5181, Ext. 329

The aim of this project is to develop experimental courses in Urban Planning and Development focusing on the inner-city with the following objectives:

a. Improvement of educational opportunities for low-income resident planners employed in the Minneapolis Model City community. Particular emphasis is placed on relating their experience to broader political and social concepts which are a part of the planning process. Additional emphasis is placed on the encouragement of qualified residents to continue their pursuit of college level study.

b. Improved understanding by college students of the reality problems encountered in attempting to plan and implement programs and policies designed to effect positive changes in the inner-city. Emphasis in this instance is again on relating the more conceptual and theoretical material to the realities of the planning process.

c. Provision of the 13 colleges and universities represented in the Consortium with the opportunity to test a unique educational approach in Urban Studies with implications for further curriculum development. To this end, courses include both residents and students in the same classes and incorporate the findings of the Consortium's interdisciplinary evaluation team presently examining the Model Cities planning process. The format calls for heavy use of community officials and leaders as resource persons (e.g., state and local government officials, state, metropolitan and local planners, etc.).

As a result of this project, colleges represented in the Consortium should be in a better position to modify existing course offerings in Urban Studies or develop additional curricula incorporating some of the experience gained in this project.

Institutional Contribution:	$ 4,000
Federal Contribution:	8,000
Total Project Budget:	$12,000

A Program of Community Development and Environmental Quality

BEMIDJI STATE COLLEGE, Bemidji, Minnesota 56601

Program Director: Mrs. Ida Mae Geittmann, Associate Director of Continuing Education, Bemidji State College, 218-755-2068

The primary objective of this program is to meet the needs of the area in community and resource development. It is the intent of this program to create an awareness of the problems confronting the people of the area so that they and the leadership can make intelligent and informed decisions governing the future of the area.

The project includes the sponsorship of programs to promote area economical development, improvement of governmental and educational service and addressing environmental and sociological needs.

Institutional Contribution:	$ 2,500
Federal Contribution:	5,000
Total Project Budget:	$ 7,500

Community Problem-Solving in Southern Minnesota Urban Regions

MANKATO STATE COLLEGE, Urban Studies Institute, Mankato, Minnesota

Program Director: Dr. Robert A. Barrett, Urban Studies Institute Director; Professor, Department of Political Science; 507-389-1714

The objectives of the program are as follows: To provide a laboratory experience for experimentation and simulation of urban problem-solving; to apply the findings of interdisciplinary research on systematic community problem solving; to sensitize community leaders and community development specialists regarding community problems and development; to encourage more flexible attitudes toward local government modernization of structure and techniques, with particular emphasis upon the newly formed Minnesota Valley Council of Governments; and to promote better use of existing information resources.

Institutional Contribution:	$10,000
Federal Contribution:	20,000
Total Project Budget:	$30,000

Western Minnesota Communication and Resource Development

MOORHEAD STATE COLLEGE, Moorhead, Minnesota 56560 (On behalf of the Tri-College University)

Program Director: Charles E. P. Simons, Dean of Social and Behavioral Sciences, Moorhead State College, Moorhead 218-236-2166

The demands placed upon established community institutions today frequently exceed their delivery ability for effective action planning, community building, and intergovernmental cooperation. In addition communities in western Minnesota are experiencing continued out migration and a declining tax base. (In this proposal "Western Minnesota" refers particularly to Region IV, but also to portions of Regions I and II.) Regional development commissions, although not yet established in western Minnesota, will eventually serve as vehicles for needed planning and development and the improvement of delivery systems (the several complexes of institutions which provide services such as health care facilities) within regions. The colleges, in western Minnesota have educational resources which can assist in the process of regional development and in the improvement of governmental and social services. The project is designed to harness these resources to contribute to the development and planning processes.

Institutional Contribution:	$24,409
Federal Contribution:	20,000
Total Project Budget:	$44,409

Continuation of Southwest Minnesota Community Service Clearinghouse

SOUTHWEST MINNESOTA STATE COLLEGE, Marshall, Minnesota, and WILLMAR STATE JUNIOR COLLEGE, Willmar, Minnesota

Program Director: Mr. Clifford D. Sibley, Assistant to the Director, Public Services and Development, Southwest Minnesota State College 507-537-7119

The 19 county area of southwestern Minnesota consists of 194 communities with both individual problems and interrelated problems. Agriculturally based, this rural area suffers from both declining population and economic bases. This situation causes related difficulties in education, health, social and other sectors.

Through the currently funded Title I project, "Southwest Minnesota Community Service Clearinghouse," communities are being provided names and pertinent information about people and agencies who possess knowledge or expertise to assist them with their problems. Also through this action project, conferences and workshops dealing with specific problems faced by communities are being held throughout the area.

Many progressive communities, particularly those with small populations, even with the assistance of the present Clearinghouse project, have difficulty in identifying their problems in a priority manner and following through on recommendations to solve the problems they face.

Institutional Contribution:	$26,308.24
Federal Contribution	20,000.00
Total Project Budget:	$46,308.24

Community Analysis Forums II — Callbacks and Updating

ST. JOHN'S UNIVERSITY, Collegeville, Minnesota

Program Director: Dr. L. Dennis Kleinsasser, Associate Director, Center for the Study of Local Government, St. John's University 612-363-7725

Phase I of this program to serve 12 selected Minnesota "micro-cities" was assisted by $11,000 from Title I last year. It is basically a "delivery system" for Micro-City research findings to Minnesota cities in the 10,000 to 50,000 size category. Too often research remains academic and gathers dust. This project is a pilot experiment to "deliver" results to cities in a practicable form for further action by them. To do this, the Center at St. John's is developing a new interdisciplinary, intercity comparative model. This model was field tested over the past 12 months through a "municipal diagnostic" service to 12 cities in Minnesota, a service not now available so far as we know anywhere in the nation.

Institutional Contribution:	$10,886
Federal Contribution:	10,000
Total Project Budget:	$20,886

Area Workshops on Intergovernmental Cooperation and Coordination

UNIVERSITY OF MINNESOTA, Department of Agricultural and Applied Economics and Agricultural Extension Service

Program Director: Charles Sargent, Associate Professor, Agricultural Economics and Community Development Specialist 373-0950

The main objective of the workshop is to provide a unique educational setting where community leaders and experienced academic and agency personnel can interact and discuss in depth alternative solutions to current local issues. An attempt is being made to improve public decision-making by putting more "power of knowledge" into the hands of the people who can influence change. Participants will include county, city and village officials and their staffs plus other community leaders and legislators.

Institutional Contribution:	$ 6,853
Federal Contribution:	12,000
Total Project Budget:	$18,853

Tri-County Poverty Assistance Program (Minnesota counties of Winona, Houston, and Fillmore)

COLLEGE OF SAINT TERESA, Winona, Minnesota

Program Director: Miss Bernadette Graf, ACSW, Assistant Professor, Social Work, College of Saint Teresa. 507-454-2930, Ext. 215

The specific problem addressed by this project is: How can the unsatisfied needs of a largely rural, economically disadvantaged segment of the population of the area with which this proposal is concerned best be served?

It has been well established that the alleviation of almost any social need can be conducted successfully through a person-to-person relationship between the individual or family and the worker. But this is an ideal which can be put into practice only if the two sides, two persons essential to the communication, are present. The agencies in the area under study (and this is by no means unique to this particular area) are not sufficiently staffed to provide this service in anything like the volume needed.

With this deficiency in mind, representatives of the Southeastern Minnesota Citizens' Action Council approached some members of the faculty of the College of Saint Teresa in the summer of 1970 with this question: Might there be students interested in performing this service as volunteers? They would have to be oriented to existing conditions and needs so that they might become competent to handle situations likely to

be encountered. If this could be done, the SEMCAC people said, then those volunteering and adequately oriented, could be put to good use. By supplementing work now being done, they could extend the usefulness of agencies in the area, including those in the SEMCAC organization, interested in making use of them. Furthermore, the work would provide the student volunteers with valuable clinical experience.

Institutional Contribution:	$ 6,350
Federal Contribution:	12,000
Total Project Budget:	$18,350

Black Family Life in an Urban Community

UNIVERSITY OF MINNESOTA — Afro-American Studies Department

Program Director: Mrs. Josie R. Johnson, Instructor, University of Minnesota, Afro-American Studies Department 376-7221 or 373-0143

There is a growing belief that a "breakdown" within the American family structure is the basis for many of society's most vexing problems. Numerous programs, all operating on the thesis that there is something both distinguishable and worthwhile within the American white family, have been designed to assist the black family in America to become "like the white family." This study adopts for exploration purposes the thesis that it might well be an important part of America's salvation that the "strengths" which are within the black family are those which should be emulated by the white family. Thus the attempt here is to determine realistically and within terms of the black experience what are the features unique to the traditional black family, which have — despite all outside efforts to the contrary — kept it a more viable force in the development of its members than is credited by existing scholarship in the field.

Institutional Contribution:	$ 3,000
Federal Contribution:	5,000
Total Project Budget:	$ 8,000

Expanding Educational Opportunity to Secondary School Dropouts Through Independent Study (Correspondence)

UNIVERSITY OF MINNESOTA, Department of Independent Study, General Extension Division

Program Director: Jerome C. Winegar, Assistant Director of Independent Study, University of Minnesota 612-373-3803

In order to provide an alternative educational structure to dropouts and to those termed "potential dropouts" by local schools, various school districts throughout the United States have developed so-called "dropout centers" during the past four years. These are operations normally located within a storefront or other non-school building. The center provides facilities for vocational and technical training in order to instruct attendees in a skill that may be useful to them when securing a job. Some centers also provide limited academic training, usually in the areas of reading, writing, and general mathematics. The limits on the academic offerings usually exist because of the employment of a staff primarily equipped to offer the vocational subjects. In order to supplement the academic offerings, most dropout centers arrange for interested persons to attend a regular secondary school on a part-time basis. Hopefully, by this cooperative method, some dropouts will eventually graduate.

Institutional Contribution:	$ 3,467
Federal Contribution:	5,000
Total Project Budget:	$ 8,467

University-Community Program for Planning and Development in the Arrowhead Region

UNIVERSITY OF MINNESOTA, DULUTH, Duluth, Minnesota 55812

Program Director: Wayne A. Jessewein, Assistant Professor of Economics, University of Minnesota, Duluth 218-726-7256

Under the proposed program the University of Minnesota through all its units, but primarily through its Duluth campus is cooperating with the Regional Commission and assisting the local communities through both a continuation and an expansion of the program begun under the previous Title I grant. The existing educational efforts aimed at assisting the Arrowhead Regional Development Commission explain to local communities of northeastern Minnesota how to function effectively within the regional structure and how to formulate and implement development plans are being continued. New educational efforts aimed at exploring selected problem areas in the process of planning and aimed at increasing the efficiency of local government operations are being started.

Institutional Contribution:	$10,000
Federal Contribution:	20,000
Total Project Budget:	$30,000

Formation of a Regional Planning Commission

UNIVERSITY OF MINNESOTA, MORRIS, Morris, Minnesota

Program Director: Sun M. Kahng, Executive Coordina-

tor, Regional Research Center for Community Development 589-2211, Ext. 279

The specific objectives of the proposed program are:

a. To facilitate the formation of a regional planning commission at the nearest possible date.

b. To strengthen and enlarge the resources and capability of the Regional Research Center for Community Development (RRCCD) at the University of Minnesota, Morris.

c. To establish a Community Development Association (CDA) to carry out various multi-county community projects.

Institutional Contribution:	$ 2,770
Federal Contribution:	3,500
Total Project Budget:	$ 6,270

West Central Regional Inter-Agent Help Program

WILLMAR STATE JUNIOR COLLEGE, Willmar, Minnesota

Program Director: Mr. Bert Phillips, Director of Community Services, Willmar State Junior College 612-235-2131

Health and social services and the particular problems with which they might deal must be viewed as part of the total social, economic system. The inter-agency comprehensive planning becomes one of the many broader areas of planning in the context of the overall development. In other words, inter-agency planning must relate closely to other planning programs within the region. It is hoped that the cooperative efforts of the inter-agency program and the agencies will result in the development of a sound planning program that will match needs and resources in the community.

Institutional Contribution:	$ 1,805
Federal Contribution:	3,500
Total Project Budget:	$ 5,305

Minnesota Catalog of Programs for Individual and Community Development

WINONA STATE COLLEGE, Winona, Minnesota

Program Directors: Ahmed H. El-Afandi, Associate Professor 507-457-2124 and C. Kenneth Meyer, Assistant Professor 507-457-2124

The overall objective of the proposed catalog is to provide a single reference for those working in the community planning field containing information on programs already in existence so as to provide for maximum use of these programs. A catalog such as that proposed will enable state legislators in the future to improve upon existing programs and to possibly avoid duplication of functions.

Institutional Contribution:	$ 1,750
Federal Contribution:	2,000
Total Project Budget:	$ 3,750

1972

Tri-County Poverty Assistance Program (Minnesota counties of Winona, Houston and Fillmore)

COLLEGE OF SAINT TERESA, Winona, Minnesota

Program Director: Miss Bernadette Graf, ACSW, Assistant Professor, Social Work, College of Saint Teresa 507-454-2930, Ext. 256

The first year's experience has shown that the person-to-person relationships which the program has been able to establish have not only satisfied the immediate needs, but in several cases have led to the discovery of more basic, deeper needs some of which are being treated. These needs may be, for example, a desire to learn to read, to learn a vocation or trade, to become qualified for a job requiring a high schol diploma, how to use the food dollar more effectively. These cases are not numerous, but it is believed that the program could move toward the improvement or motivation of at least a part of the disadvantaged segment and the partial elimination of some of the resignation to a poverty existence or the encouragement of a spark of desire to emerge from an existence of hopeless and endless poverty.

Institutional Contribution:	$ 6,900
Federal Contribution:	10,000
Total Project Budget:	$16,900

Central Minnesota Public Service Consortium, Phase I

COLLEGE OF ST. BENEDICT, St. Joseph, Minnesota

Program Director: Dr. Robert Wick, Distinguished Service Professor, St. Cloud State College, St. Cloud, Minnesota 612-255-0121

The objectives of this project are to inventory the needs of the region, the capabilities of the colleges, the feasibility of some type of consortium structure, the creation and staffing structure, the formation of action programs to meet the needs as defined in the earlier mentioned survey, and data collection. This is an operation that requires more than a year to implement. Consequently, although much of the preliminary work will involve action, it is a type of action that will logically

lead in the direction of increasingly direct assaults on community problems — a necessary preliminary to mounting a continuous action program within the region. It *is* action on one of the region's most pressing problems — the absence of a viable mechanism to provide sophisticated services, research and problem solving capability.

Institutional Contribution:	$14,918
Federal Contribution:	18,000
Total Project Budget:	$32,918

Model Instructional Program for Local Officials

ST. JOHN'S UNIVERSITY, Collegeville, Minnesota 56321

Mr. David Slipy, Micro-City Project Director, Center for the Study of Local Government, St. John's University, 612-363-7725

The objectives of our instructional program for municipal officials were created cooperatively with the University of Minnesota staff. Based on the specific problem, this program is to create and test a model instructional program for local decision-makers from communities in out-state Minnesota. In order to form a comprehensive educational effort, the creation of such a program will be coordinated with the University of Minnesota as described below and will incorporate materials being created by the Metropolitan Council. These materials will be in the form of a planning and zoning training manual.

The efforts are being directed toward creating and testing a model program that will enable local officials to:

1. Define "community planning" as distinguished from "zoning" and identify its role in a community.
2. Define their own needs for training in the planning process.
3. Identify and participate in the major steps of a planning process.
4. Recognize their own role and the functions of others in this process.
5. Use the tools that are available to them in planning, recognizing appropriate and inappropriate uses.
6. Improve decision-making skills with a recognition of responsibility and the long range effects of decisions on the community.
7. Recognize the importance of relating land planning decisions to the comprehensive community plan.

In addition to these objectives, the program has an experimental focus. With the University of Minnesota project proposal, it is hoped that comparative data regarding effective alternative strategies for training can be gathered, given common objectives and evaluative techniques.

Whereas, the Center is working with two or three communities in the out-state area, the University project draws representative participants from several local units around the metropolitan area. The Center is attempting to have 100% participation by municipal officials in the communities that they work with, while the University project deals with representative participants. Results of the techniques being tested may suggest a variety of strategies for programming in other parts of Minnesota. The long-range aim, not included in this proposal, would involve implementation of the instructional program throughout the state.

Institutional Contribution:	$ 6,525
Federal Contribution:	12,667
Total Project Budget:	$19,192

Housing Needs for the Low Income and Elderly

UNIVERSITY OF MINNESOTA Agricultural Extension Service, St. Paul, Minnesota

Program Director: William J. Sliney, Area Extension Coordinator, University of Minnesota 218-755-2069

The principle objective of this project is to provide adequate housing for the people of the three-county area by creating an awareness of the housing situation and the resources available to provide better housing.

More specific objectives are:

a. Investigate with public officials and community leaders the need for county Housing and Redevelopment Authorities.
b. Inform the general public and community leaders on the availability of private and public financial assistance for housing.
c. Inform individual home builders, remodelers, public housing officials and contractors on housing space needs, psychological needs and the economics of building and home ownership.
d. Investigate with public officials, housing authorities and community leaders the phenomenon of the disproportionate number of older men to older women and the implication it may have for senior citizen housing.

Institutional Contribution:	$10,050
Federal Contribution:	8,910
Total Project Budget:	$18,960

A Collaborative Approach to the Regenerating of Rural Regions in Minnesota

UNIVERSITY OF MINNESOTA, Minneapolis, Minnesota

Program Director: Robert D. Clemence, Associate Professor of Architecture, and Coordinator, Urban Education Center, University of Minnesota 373-2198 and 827-2608.

This project calls for an application of the service/learning concept (referred to in parts one and two) focusing on Renville County and the Renville County Region in westcentral Minnesota.

There are rather specific reasons for choosing the Renville County Region as the demonstration area for this concept.

First of all, the proposed project has already been piloted successfully in the Bird Island-Olivia area of Renville County by two University students (John Sanger, now a graduate of the School of Architecture and Eric Bundlie, now a Journalism School graduate), and a very receptive climate for country-wide cooperation has been established. If, and this is the hope and intention, John Sanger can continue his affiliation with the project in the role of field coordinator, we are confident that county residents will welcome the collaborative input of other young people from the University. And, as noted in part two of this proposal, the presence of community receptiveness is essential if outside contributions are to be meaningful. We would in fact hope that much (but not all) of the student input would come from University students who have grown up in rural or small town Minnesota. This would assure us that they would be welcome as returning "insiders" with special educational talents and an interest in their homeland. In addition it might even yield a cadre of students with as much dedication to rural community viability as that now found in John Sanger.

Institutional Contribution:	$ 8,908
Federal Contribution:	14,000
Total Project Budget:	$22,908

Development of a Pilot Center for Home Improvement Design Services for Referred Low Income Clients in Minneapolis, Minnesota

UNIVERSITY OF MINNESOTA, St. Paul, Minnesota
Program Director: Gertrude Esteros, Head, Design Department, University of Minnesota 373-1015

The purpose is to provide low income clients with alternative solutions to home improvements. The center for home improvement design services would serve as an "idea" source. It is an old house in need of many improvements. Differing kinds of wall and floor treatment, storage, furnishings and equipment would all provide suggestions for clients' own problems. The improvement of the center itself would be accomplished largely by do-it-yourself volunteers — University students and volunteer professionals. (If feasible, there may be some client assistance.) Some of the rooms would be used as workshop areas where clients could work on their own furnishings problems with help of the volunteer professionals (student and other) and aides. Individual consultation service would be provided.

To establish a method for using talents and skills of University housing and interior design personnel in community improvement. This has dual purpose: (1) to help solve community problems; (2) to provide educational field work experience for students and continuing contact with community agencies and low income home environment problems for faculty.

To establish a liaison with community organizations concerned with home improvement services. The two organizations most closely concerned with this proposal will be a private non-profit corporation, *Project for Pride in Living* (a project of Advocate Services, Inc.), and the Minneapolis Model Cities Housing Bureau. In addition, welfare agencies who make referrals of clients would be involved.

Institutional Contribution:	$ 9,048
Federal Contribution:	16,200
Total Project Budget:	$25,248

Indian Mini-College for Urban Indians

METROPOLITAN STATE JUNIOR COLLEGE, 50 Willow Street, Minneapolis, Minnesota

Program Director: Howard E. Bergstrom, President, Metropolitan State Junior College, 335-8944

The most specific goal of the project is an effort to humanize education. The overall program and courses developed for the mini-college are aimed at changing previous educational patterns, stimulating a motivation to learn and assisting in career direction. This can be done by the use of trained Indian personnel, the development of courses related to the residents' culture and values, and teaching the courses in their home area.

It is not anticipated that this program will accomplish the total objective of proper education of Indians, but it will be an action with a positive direction and course. It is a start, a beginning, and an attempt to find a possible solution to the educational system for Indian people with Indians participating and advising this project.

Institutional Contribution:	$10,600
Federal Contribution:	12,150
Total Project Budget:	$22,750

Southwest Minnesota Community Service Clearinghouse

SOUTHWEST MINNESOTA STATE COLLEGE, Marshall, Minnesota;

WILLMAR STATE JUNIOR COLLEGE, Willmar, Minnesota;

WORTHINGTON STATE JUNIOR COLLEGE, Worthington, Minnesota.

Program Director: Mr. Clifford D. Sibley, Director, Center for Community Services, Southwest Minnesota State College, Marshall, Minnesota 507-537-7119

The principal objectives of this project are:

a. Identify and select six-ten communities in southwestern Minnesota to act as models for organizing, developing problem-solving procedures and applying problem-solving procedures in a planned manner to the problems they face.

b. To match expertise of selected college faculty and students from Southwest Minnesota State College, Willmar State Junior College, and Worthington State Junior College to problems faced by area communities.

c. Through cooperative, team approaches by personnel from the three institutions, work with area communities to find solutions to community problems.

d. Act as a model for similar communities; provide both a written history of the model communities' processes and actions and serve as open laboratories to visitors from other communities.

e. Disseminate a quarterly progress report regarding problem-solving activities of the model communities.

f. Model communities will host a conference to share with leaders of other communities the problem-solving process they followed and their successes and failures.

Institutional Contribution:	$14,933
Federal Contribution:	14,868
Total Project Budget:	$29,801

West Minnesota Communication and Resource Development (Phase II)

MOORHEAD STATE COLLEGE, Moorhead, Minnesota 56560 (On behalf of Concordia College, Fergus Falls State Junior College, Moorhead State College, North Dakota State University, University of Minnesota, University of Minnesota at Morris, and the Adult Distributive Education Program of the Area Vocational-Technical Institutes)

Program Director: Dr. Byron L. Schmid, Assistant Professor of Political Science, Moorhead State College, Moorhead, Minnesota 218-236-2942

The overall objective of the West Minnesota Consortium (Concordia College, Fergus Falls State Junior College, Moorhead State College, North Dakota State University, the University of Minnesota, the University of Minnesota at Morris, and the Adult Distributive Education Program of the Area Vocational-Technical Institutes) proposal is development of partnerships between units of government and institutions of higher education in west Minnesota for community and regional problem-solving activities. The program proposes development of cooperative relationships with the regional development commission and other units of government through which the resources of higher education can be made available for problem-solving activities in order that educators can join with public officials, agency personnel and planners and other interested citizens in efforts designed to guide creative change in the regional community.

Institutional Contribution:	$23,976
Federal Contribution:	17,973
Total Project Budget:	$41,949

Region IX Community and Regional Development

MANKATO STATE COLLEGE, Urban Studies Institute, Mankato, Minnesota

Program Director: Mr. Roger A. Davis, Assistant Director of Community Service, Urban Studies Institute 507-389-6425

Communities need help and colleges need to offer legitimacy both to their students and to the public. A natural blending of the centers of training and knowledge with centers of urban and regional problems seems to offer itself as an acceptable proposal to both parties. If government programs are to become less overwhelming to communities in need, this type of proposal can become a key element to implementation. If the people of our state are to accept the increasing burdens and commitment to higher education then tangible programs such as this one, which they can touch and see working are needed now. If we are to channel the energies of students toward constructive use of their talents and if we are to assist them in acquiring problem-solving talents, once again, this type of proposal is needed. Finally, if we are to take seriously the commitment of our youth and their desire to have something to say concerning the direction and quality of their educational effort, particularly about the environment, then this project clearly has its objectives defined.

Institutional Contribution:	$11,059
Federal Contribution:	17,550
Total Project Budget:	$28,609

Action Systems for Community Problem-Solving and Rural Development

BEMIDJI STATE COLLEGE, Bemidji, Minnesota 56601

Program Director: Edward Gersich, Director of Area Services, Bemidji State College 218-755-2068

Priority objectives are concerned with initiating, developing and implementing needed programs as determined by the Northern Minnesota Coordinating Council for Continuing Education and Community Services (hereafter referred to as NMCCCECS) group. The people in the service area should experience increased awareness, understanding and appreciation of and ability to analyze local, physical, social, cultural and economic conditions, trends, problems and public issues. It is intended that this will enhance and improve their decision-making about problems, issues and opportunities. A primary objective is to provide those research results and other information to communities, groups, individuals and agencies which will assist in developing their human, institutional, cultural and natural resources implied by the several local, regional and state contexts. It is intended that this will enhance the understanding of and desire to cope with those forces which are changing established rural communities and will improve the educational capabilities of cooperating institutions to deal with problems of rural development, new rural forms and rural growth.

Institutional Contribution:	$ 7,560
Federal Contribution:	10,440
Total Project Budget:	$18,000

APPENDIX R

COMPUTER REPORT

SUMMARY AND REVIEW OF COMPUTING ACTIVITIES AND BUDGET REQUESTS FOR THEIR SUPPORT IN MINNESOTA POST-SECONDARY EDUCATION, 1973-1975

I. Introduction

The Minnesota Higher Education Coordinating Commission was established in 1965 by the Minnesota State Legislature to review and coordinate various aspects of post-secondary education. The five "systems" of education represented on the Commission are the University of Minnesota, the Minnesota State College System, the Minnesota State Junior Colleges, the private colleges (represented through the Minnesota Private College Council), and the Area Vocational-Technical Institutes which report through the State Department of Education.

In 1970 an intensive study of the use of computers in Minnesota post-secondary education was carried out as part of an overall study of State Information Systems sponsored by the Governor's Advisory Committee on Information Systems. The study resulted in a report, *Computers and Information Systems in Higher Education, 1970-1980,* which suggested that the requirements for instructional, research, and administrative computing and data processing in post-secondary education can be met most effectively through implementation of a long-range plan for cooperative planning and utilization of computers. The Minnesota Higher Education Coordinating Commission endorsed this suggestion and adopted a policy statement which, taken with other recommendations in the report and legislation passed by the 1971 Legislature, defined for the Commission five responsibilities:

(1) Develop plans and policies for assuring coordinated and efficient development of the use of computers and related information systems in higher education, and recommending implementation thereof to the Commissioner of Administration (Chapter 918, H. F. 2166, Section 3. [16.92])

(2) Prepare for each session of the State Legislature a report on computing activities and facilities in post-secondary education during the previous biennium, indicating how their evolution has been consistent with or deviated from the long-range plan and how that plan should be modified for the future.

(3) Prepare for each session of the State Legislature a summary of the proposed computing budgets of each of the four publicly-supported systems of post-secondary education, along with a plan for the development of computing facilities and services over the next biennium.

(4) Review and make recommendations on proposals for establishing new computing facilities in the publicly-supported institutions of post-secondary education.

(5) Establish technical standards for computer hardware and software — especially that connected with remote communications between computers and terminals — to facilitate sharing and exchange of facilities and services among the institutions of the state.

The Commission has requested the Computer Advisory Committee to assist in the responsibility for preparing these reports, reviews and standards. This Committee is constituted of two members each representing the University of Minnesota, the State College System, the State Junior Colleges, the Area Vocational-Technical Institutes, and the private colleges of the state, plus one representative from the State Department of Administration and one from the Governor's Advisory Committee on Information Systems.

This report, prepared by the Computer Advisory Committee of the Minnesota Higher Education Coordinating Commission, responds to items (2) and (3) above; it is a very brief report on the computing activities and facilities in post-secondary education over the past biennium and a summary and review of the proposed computing budgets within post-secondary education for the 1973-75 biennium. The basis of the Committee's review of past progress and future plans is the 1970 report mentioned above (hereinafter referred to as the "State Plan"). This plan recommended the development of a computing capacity in Minnesota higher education which by 1975 would be adequate to meet two general goals (p. 4-17):

(1) "Provide educational computing services for all of higher education in Minnesota equivalent to that available at a few leading universities of the nation in 1967-68."

(2) "Establish machine-readable data bases and an administrative data processing capacity

which is sufficient to support the management information needs of institutions and systems of higher education and lay the basis for program planning and budgeting."

The plan contained detailed computer capacity estimates for meeting these goals by 1975, as well as estimates of the facilities and operating costs involved. These cost estimates were not adjusted to allow for inflation, and the recommendations were not cut back in response to anticipated state fiscal problems. They were aimed at achieving the reasonable goals stated above by about 1975; the 1971-73 computing budget requests to the Legislature were based on linear progress toward those goals.

The basis of the present requests and of this budget review is to continue that progress as outlined in the State Plan. Since its specific recommendations of facilities and costs extend through 1975, this review is based on those specific recommendations and projections. It is the responsibility of the governing boards of the various systems of education, the Higher Education Coordinating Commission, the Governor's office, the State Department of Administration, and the Legislature to review these requests and recommendations and scale them to the resources which they feel can be allocated to this kind of activity in higher education, making appropriate allowances for the merits of the proposed computing activities and for other demands on public funds.

The budget requests summarized in this document for the University of Minnesota, the State College System, and the State Junior Colleges have been approved by the respective governing boards of those systems. The Computer Advisory Committee, in submitting this report, recommends to the Minnesota Higher Education Coordinating Commission that these budget requests be approved and be recommended to the Governor and to the Legislature for approval and funding. In addition to these system requests, the Committee has recommended four inter-system proposals for funding and implementation through the Higher Education Coordinating Commission itself; these are summarized in Section V of this report. Following the final decision on resources which can be allotted to computing in post-secondary education, the Computer Advisory Committee and the Higher Education Coordinating Commission will again review the allotments to coordinate the use of available resources to meet the most important needs at the least possible cost.

One of the major tasks for the 1975-77 biennium will be extension of the detailed State Plan beyond the 1975 date to 1980. For that purpose, a number of *ad hoc* and formal committees have been active over the past several months, devising plans which may more closely link all educational computing activities in the state. The most advanced and far-reaching of these planning efforts is the work of the Governor's Joint Committee on Computers in Education* to investigate the establishment of an organization (Minnesota Educational Computer Consortium — MECC) to provide computing and data processing services to all educational institutions in the state. It is not possible at this time (early October 1972) to predict the outcome of these discussions and their possible effect on the budget requests summarized in this report. The Computer Advisory Committee, however, has reviewed the Minnesota (Educational Computer Consortium) Proposal and discussed the problem of how it relates to this report. Their conclusion was that the budget requests are directly related to essential programs within the submitting systems and should stand as they are; that they will form the basis for participation by higher education in any consortium which may be formed.

The format of this review is as follows:

Section II: Qualitative identification of accomplishments during the 1971-73 biennium and plans for 1973-75 within each system, and how these accomplishments and plans relate to and deviate from the State Plan;

Section III: A quantitative summary of proposed system budgets and comparison of them with cost estimates in the State Plan for 1973-75;

Section IV: An overall summary of budget requests for 1973-75 from all systems, and comparison with the State Plan;

Section V: Recommendations of an inter-system nature requiring funding and implementation through the Higher Education Coordinating Commission;

Appendices: Detailed statements and descriptions of proposed budgets for computing facilities and operating support from each of the systems of post-secondary education.

II. 1971-73 Progress and 1973-75 Programs Proposed by the Systems of Post-Secondary Education — Comparison with the State Plan

University of Minnesota

Computing activities at the University of Minnesota are divided into two categories: administra-

*Members of the Governor's Joint Committee on Computers in Education are: Richard L. Brubacher (Chairman), Edgar Carlson, Howard B. Casmey, Richard C. Hawk, Philip C. Helland, Gilbert A. Holmes, G. Theodore Mitau, W. G. Shepherd, Edward G. Ziegler.

tive and instruction-research. For administrative data processing, the State Plan was rather general in its recommendations. At the same time the 1970 study was under way, the University's administrative data processing operations were under scrutiny by an outside consultant, and since then the data processing activities on the Duluth Campus of the University have undergone the same kind of study. In deference to these more complete studies, the State Plan did not offer any specific recommendations. These other studies have been completed and progress has been made in accordance with them. The Administrative Data Processing Division has been expanding its applications services and adding to the peripheral and remote communications facilities of its IBM 360/50 computer system to implement this expansion. In 1972-73 work is beginning on the design of a student registration system and on the implementation of a remote terminal link beween the Duluth Campus and the 360/50.

The University does not include in its budget an item for support of administrative data processing — funds to support these activities are programmatic expenditures within the units which use services from the Administrative Data Processing Division. The University's "budget request" for administrative data processing, therefore, is in fact a projection of the costs of providing services which are budgeted within departments and other administrative units. This projection includes core memory and peripheral expansion on the IBM 360/50 to support additional remote data processing activities and additional applications an annual contribution to a sinking fund from which such additions are financed and which accumulates reserves for needed replacements and upgrading of equipment; a remote terminal and staff for data processing from the Duluth Campus on the Minneapolis computer; and operating support which is commensurate with these additions. On the basis of the dollar figures in the State Plan, the University's request for operating support for administrative computing is higher; on the basis of the formula adopted for calculating the costs of administrative data processing in the State Plan, the request is lower.

For eductional computing (instruction and research), the State Plan envisioned for 1971-73 and 1973-75 a continued expansion of the CDC 6600 computer's capacity to service remote terminals as a statewide computing facility. Small additions to a number of the University's dedicated instructional computing facilities were also anticipated (Health Sciences, Duluth, West Bank, Hybrid, and special-purpose laboratory and vocational training computers). And finally, expansion of the use of time-shared computing was expected. These developments have proceeded generally as they were anticipated in the State Plan, even though the 1971-73 appropriations in support of these programs were significantly less than proposed. The substantial progress has been made possible by some engineering developments and by the acquisition and refurbishing of a large number of used remote terminals at an extremely low price. As a result, the remote computing capability of the CDC 6600 has grown more rapidly than expected and has changed the facilities needs of the University significantly, without changing the general thrust of service anticipated in the State Plan. The University is proposing that substantially less facilities funding go into the smaller computers and terminals in 1973-74, and that some funds be diverted to a major core expansion and some peripherals needed to service the demands on the 6600 which have been growing faster than anticipated. This addition will obviate the need for a central processor addition which was anticipated for 1975-76 at a cost of $1.8 million. The next major expansion of the University's primary instruction and research computing facilities will come at a later time and will require replacement of the central computer.

On the Duluth Campus of the University, the State Plan envisioned a modest expansion in the core memory of the CDC 3200 computer to keep pace with the growing demand for instruction-research computing and to provide some services to other institutions and agencies in northeastern Minnesota. During the past year it has been possible for the University to exchange rights to a new operating system developed by Dr. John Gergen, Director of the University of Minnesota, Duluth Computer Center, with Control Data Corporation for substantially more additional core money and peripherals than anticipated, and at no cost to the state. The Duluth computer facility now has, as a result, almost the same capacity as the Mankato State College Univac 1106.

State College System

The State Plan called for development of a network of regional computer centers, with a two-hub configuration planned for the State College System. A phased approach to this configuration was recommended, with establishment of the first hub at Mankato in 1970 (the Univac 1106), and a medium-scale computer at St. Cloud in 1972-73 which would be expanded to a large facility in 1974-75. During the 1971-73 biennium, the Mankato computer facility has been an outstanding success, especially in providing instructional computing services to colleges and high schools in

the area. The State College System has made a decision to designate Mankato as an educational computing center, and to identify the facility at St. Cloud State College as an administrative data processing center to serve the rapidly-growing management information needs of the State College Board staff and all of the state colleges. For this reason, a somewhat larger computer currently is being installed at St. Cloud than the State Plan envisioned for 1972-73, and the core memory size of the Mankato 1106 will soon be expanded to accommodate the increasingly heavy load placed upon it. The decision to differentiate roles of the two major computer facilities in the State College System is consistent with experience at the University, in the Junior College System, and in most other major educational institutions and systems throughout the nation.

State Junior Colleges

Administrative data processing began in the Minnesota State Junior Colleges in the 1967-68 academic year with the acquisition of a second-generation IBM 1401 computer with core capacity of 12,000 characters and supporting unit record equipment. Services were provided to five of the existing 17 colleges.

In the Fall Quarter of 1968 student registration was completed for all 17 colleges with a total enrollment of 13,103 FTE students. Computer center personnel consisted of a full-time director, one full-time and one half-time keypunch operator, and student help.

Since 1967 the student population has increased to over 18,033 FTE. In order to handle the expanded enrollment and the additional administrative data processing services to the colleges, a third generation IBM System 360, Model 25 with 48,000 bytes (characters) of internal core storage was installed in January 1972. This increase in computing capacity is in accordance with the State Plan which also suggested adding a remote inquiry system for use in individual colleges. The Plan did not, however, include the cost of this expansion in the proposed budget figures. The projected costs are included in the Junior College Board's budget request.

The Junior Colleges' experience in instructional time-shared computing has been very successful, but this use has not developed to the extent projected in the State Plan. The less-than-expected involvement is attributed to two factors: Instructors in only a limited number of disciplines are active in the time-sharing plan and usage varies from college to college. Some colleges are very limited in their participation. This is due largely to a lack of knowledge and sophistication in the use of instructional computing by the instructional staff. Accordingly, the Junior College Board budget has included a larger amount for coordination and workshops to encourage expansion to other disciplines and to assist colleges in providing this valuable instructional tool to more students than are now being served.

Private Colleges

A difficulty exists in the inclusion of the private colleges in this report. Because there is no central information source or uniform reporting code, information on the private colleges is very difficult to collect. For this review, the best that could be done was to collect incomplete information from 19 four-year colleges on their facilities, services used, staff, courses offered, and estimated 1972-73 expenditures for computing and data processing activities. This information provides an indication of the present level of activity, but it is not possible to compare it in detail with the situation two years ago or with State Plan projections. The only recommendation in the 1970 State Plan was the establishment of a fund to support 50 percent of the cost of private college use of public computer facilities. This fund was not requested of the 1971 Legislature.

The situation has improved a little since 1970. For example:

- — Bethel and Hamline have mini-computer systems
- — Concordia and St. Thomas have or plan to use terminals to MERITSS
- — Gustavus Adolphus is tied into the Mankato 1106, and
- — St. Thomas into the University 6600

But the problem still is serious. The private colleges, in general, cannot incorporate computing services into their educational or administrative activities to the extent that they should. (There are, of course, notable exceptions: Carleton and St. Thomas in particular). Yet private colleges have, in the past (and may in the future, depending on support), significantly contributed to the state of the art of computing in Minnesota. They have made a real contribution to the coordination of academic computing in higher education at significant expense to themselves and for the benefit of all of higher education.

The two basic needs of the private colleges are:

(1) Increased coordination among the private institutions themselves and with public and statewide facilities;

(2) Support for the participation of private institutions in statewide projects and coordination efforts.

Some recommendations in Section V of this report may help private colleges upgrade their computing-related activities and programs and interact more effectively with one another and with the coordinating mechanisms available under the Higher Education Coordinating Commission.

Area Vocational-Technical Institutes

During the 1971-73 biennium, some of the area vocational-technical insitutes have upgraded the computer systems used in their data processing instructional programs (Alexandria, Duluth); some of them have added small, limited-capacity computers (Austin, St. Cloud), and in keeping with a specific recommendation in the State Plan, two have acquired remote terminals to the Mankato AVTI computer for use in training students in accounting and related business programs (Canby, Jackson). As part of the coordinated activity in working with the Computer Advisory Committee, a reorganization plan has been developed for the redeployment of computer hardware within the area vocational-technical institutes.

However, the vocational-technical system computer budgets are not contained in this report. Budgetary information by institute has not been collected in the past. All area vocational-technical institute computer-related budget data has been incorporated with that of each local district for presentation to the Commissioner of Education. Because of this, there is no historical base upon which to project biennial expenditures for each institute involved.

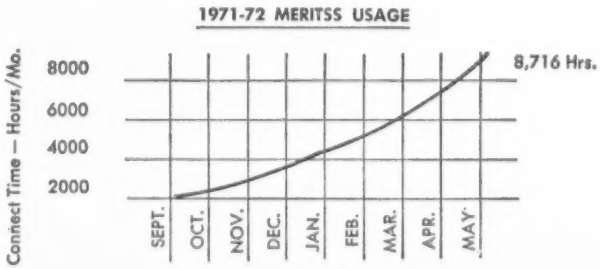
It is anticipated that budgetary data by institute will be available for the first time in October or early November. At that time it will be made available to the Computer Advisory Committee for forwarding to the Higher Education Coordinating Commission and the Department of Administration as an addendum budget to the other systems of higher education. This addendum should be available to the Deparment of Administration by the end of the calendar year.

Minnesota Educational Regional Interactive Time Sharing System (MERITSS)

MERITSS is a joint project of all the higher education systems in the state. This regional computer facility was recommended in the State Plan and has offered time-shared computer services to educational institutions in the upper Midwest since fall 1971. The facility is a CDC Cyber-72 computer system which is located at and managed by the University of Minnesota Computer Center for all of higher education. Many students throughout the upper Midwest use teletype or cathode-ray-tube display terminals to communicate with the computer over standard telephone lines.

By April 1972, MERITSS was serving all 18 State Junior Colleges, the Twin Cities and Morris Campuses of the University of Minnesota, the College of St. Thomas, Winona State College, and Moorhead State College. The University of Nebraska at Omaha and the Fargo-Moorhead public secondary schools also use MERITSS by special arrangement.

Students at these institutions use the system with its four main programming languages for assistance in learning German and calculus; for immediate processing of laboratory data; for quick access to large data stores; and for problem-solving. It is a highly adaptable tool for use in almost any classroom.



It is estimated that the MERITSS system has brought computer time-sharing to 15,000 post-secondary student users during the past year. The MERITSS system can accommodate up to 128 active terminals in its initial configurations; 78 were in use as of June 1972. The graph shows the substantial increase in the number of connect hours from September 1971 through May 1972.

Plans for the immediate future include three instructional laboratories at the University each equipped with ten terminals. The state colleges and state junior colleges also plan to expand their usage.

Other Recommendations of the State Plan

In addition to the recommendations for computing facilities and support in the individual institutions and systems of higher education, the State Plan recommended the funding of four other computer development activities as important to the evolution of effective computer utilization in Minnesota higher education:

(1) About $3 million was recommended for the biennium to support the first phase of a major statewide library automation project which would eventually provide automated

services and processing for all libraries in the state and substantially reduce future cost increases for library services. This rather large request was not formally presented to the Legislature, and the Library Advisory Committee of the Higher Education Coordinating Commission, which has been instrumental in promoting this recommendation, has been inactive since that time.

(2) $270,000 was recommended in the State Plan to support developmental activities in computer-assisted instruction. This request was not made. The University did request some support for developmental work and usage of computer-assisted instruction. The statewide time-shared computing system, MERITSS, has been the vehicle for this work, and systems software has been partially developed to support CAI on this facility. As the state moves toward a more closely integrated computing system for all of education, funds to support CAI development will become *increasingly* important if the state is to exploit the potential benefits of this form of instruction.

(3) A biennial appropriation of $350,000 was recommended to support developmental projects in computer utilization in higher education. Although this recommendation was based on the success of a similar $300,000 appropriation for the 1969-71 biennium, it was not submitted to the Legislature. Funding to the individual systems in 1971 was adequate, so the loss of this development fund was not damaging to the goals of the plan.

(4) $105,000 was recommended in the State Plan for the 1971-73 biennium to encourage and assist in the development of adequate computer services within the private colleges by subsidizing their use of facilities in the public sector of higher education. The intent of this recommendation was to build up the level of this subsidy over a period of years to cover eventually about half the cost of educational computing within the private colleges. This recommendation was not presented to the 1971 Legislature.

These four recommendations were not considered in 1971. With the exception of number (4) at a reduced level, they are not being recommended for action in 1973 in form presented by the 1970 State Plan. However, there are four recommendations in Section V of this report which satisfy some of the needs identified above, though at less cost than envisioned in 1971.

III. Summary of Proposed System Budgets and Comparison with the State Plan

It should be stressed once again that the cost estimates from the State Plan, against which the proposed budgets are compared here, all are based on reasonable formula calculations. Briefly, the formulas used are these:

(1) Facilities for educational computing: The cost of computer hardware and terminals adequate to provide the computing capacity and input/output capacity required for instructional use by students at various levels and in various kinds of academic and vocational programs. These estimates are based on an 80 percent utilization factor for a 14-hour day, and include a mix of time-shared and remote job entry or on-site computing which was judged most suited to the institutions and academic programs involved. Where computing facilities are leased, their cost was figured as 27 percent of purchase price per year. (An additional 3 percent maintenance cost was included under operating costs.)

(2) Operating costs for educational computing facilities: These were estimated to equal the annual lease plus maintenance cost, or 30 percent of purchase price per year, for this particular kind of computing in which students and faculty are doing most of the programming as part of their educational process. Telephone line communications costs for terminals are included here.

(3) Facilities for administrative data processing: The cost of the computer hardware, input/output devices, and mass data storage equipment necessary to computerize all of an institution's administrative data applications, assuming three-shift per day operation. Most of these applications are proportional to *headcount* enrollment.

(4) Operating costs for administrative data proceessing: Following standard practice, the operating costs were estimated at twice the annual lease plus maintenance cost for administrative applications, or 60 percent of purchase price per year. This reflects the greatly increased need for applications programmers to implement data systems for large, complex institutions. Communication line costs for remote terminals are included here.

(5) Projections from 1970 to 1975: The projected facilities and operating budget estimates for the years 1971 through 1975 were based on a uniform rate of increase of expenditures, starting from the existing base

budgets of 1970 and aiming at the goal of adequate computing power for higher education in 1975, as defined in the Introduction. The estimates in the State Plan were all in 1970 dollars — they did not include any inflationary factors. The last graph in this section (Figure 4) includes a conservative 5 percent increment for wage and price inflation added to the 1973-75 projections from the State Plan.

University of Minnesota (See Table 1 and Figure 1).

As mentioned above, the proposed administrative computing expenditures of the University are higher than projected by the State Plan because of the inadequate allowance for necessary facilities additions in the Plan. Facilities costs for the instructional computing are substantially less than projected because of the much lower cost of remote terminals to the 6600 and because some of the special-purpose computing facility expansion projected by the Plan has proven to be unnecessary. The tota' proposed expenditures are significantly below those projected in the State Plan, even without taking into account wage-price inflation.

State Colleges (See Table 2 and Figure 2)

For the state colleges, there is a rather large difference between the State Plan projection and the system's budget request for 1973-74. The difference is attributable for the most part to two items: (1) the decision to accelerate the planned upgrading of the St. Cloud administrative data processing facility and, (2) the need to upgrade Bemidji to third-generation computing capability.

State Junior Colleges (See Table 3 and Figure 3)

There is some variance between the Junior College Board computing budget request and the State Plan projection. Although the body of the State Plan recommended an expansion in administrative computing, the cost estimates presented there were less than adequate in support of that recommendation. The budget request is for the level of effort recommended by the State Plan and includes inflationary effects that have occurred since the State Plan was proposed.

The instructional facilities request of the Junior College Board is less than that recommended by the State Plan while, on the other hand, the request for operating support is higher. The difference exists because of less rapid expansion in the use of the time-shared computing services due to a lack of sophistication and experience on the part of college staff members. The need for the coming biennium is for training and support rather than for gre atly expanded facilities.

The net result is that the total request of the Junior College Board for the 1973-75 biennium is approximately 3 per cent less than that recommended in the State Plan.

Private Colleges (See Table 4)

As mentioned above, the only budget data which could be collected for private colleges was projected expenditures for 1972-73 for 17 of the 19 four-year colleges surveyed. This information, summarized in Table 4, indicates the magnitude of activity in this sector of higher education. The annual level of expenditure by private colleges is substantial (over $800,000) and somewhat larger than that projected in the State Plan for 1975-76 (Tables 4.1, 4.2, 4.3). But the services at all but a few colleges are significantly below the level suggested in the State Plan.

MERITSS

The table below displays the estimated budget contributions of post-secondary systems to MERITSS. These contributions are contained in the individual systems' plans and requests (Tables 1-4 and Figures 1-3): they do *not* constitute a separate budget request.

	1972-73	1973-74	1974-75
1. University of Minnesota ...	$126,400	$232,160	$327,920
2. State College System	52,599	89,897	99,029
3. Junior College System	105,560	149,272	217,172
4. Private Colleges	10,500	12,000	24,000
Estimated Total	$305,059	$483,329	$668,121

The following four tables and three figures summarize the computing budgets for the various systems compared with the State Plan. Private college budgets are also included.

Table 1

COMPUTING BUDGETS, UNIVERSITY OF MINNESOTA

	1972-73		1973-74		1974-75	
	State Plan[c]	Budgeted	State Plan	Request	State Plan	Request
Facilities						
Administrative[b]	$ 70,000	$ 200,000	$ 19,000	$ 223,000	$ 19,000	$ 250,000
Instructional	602,000	47,000	752,000	147,100[d]	677,000	430,000[d]
TOTAL	$ 672,000	$ 247,000	$ 771,000	$ 370,000	$ 696,000	$ 680,000
Operating Support						
Administrative[b]	$ 810,000	$ 860,000	$ 870,000	$1,078,123	$ 920,000	$1,086,944
Instructional[a]	979,900	957,000	1,220,000	1,126,290	1,456,000	1,285,050
TOTAL	$1,789,900	$1,817,000	$2,090,000	$2,204,413	$2,376,000	$2,371,994
GRAND TOTAL	$2,461,900	$2,064,000	$2,861,000	$2,574,513	$3,072,000	$3,051,994

[a]Includes 5% of the cost of MERITSS, corresponding to University use of MERITSS.
[b]Figures here are anticipated expenditures of user departments rather than direct budget requests.
[c]All State Plan estimates are in 1970 dollars.
[d]$227,500 in income from research and other outside users is budgeted to offset the cost of some of these facilities to the state by that amount. See Appendix A. Table 1b.

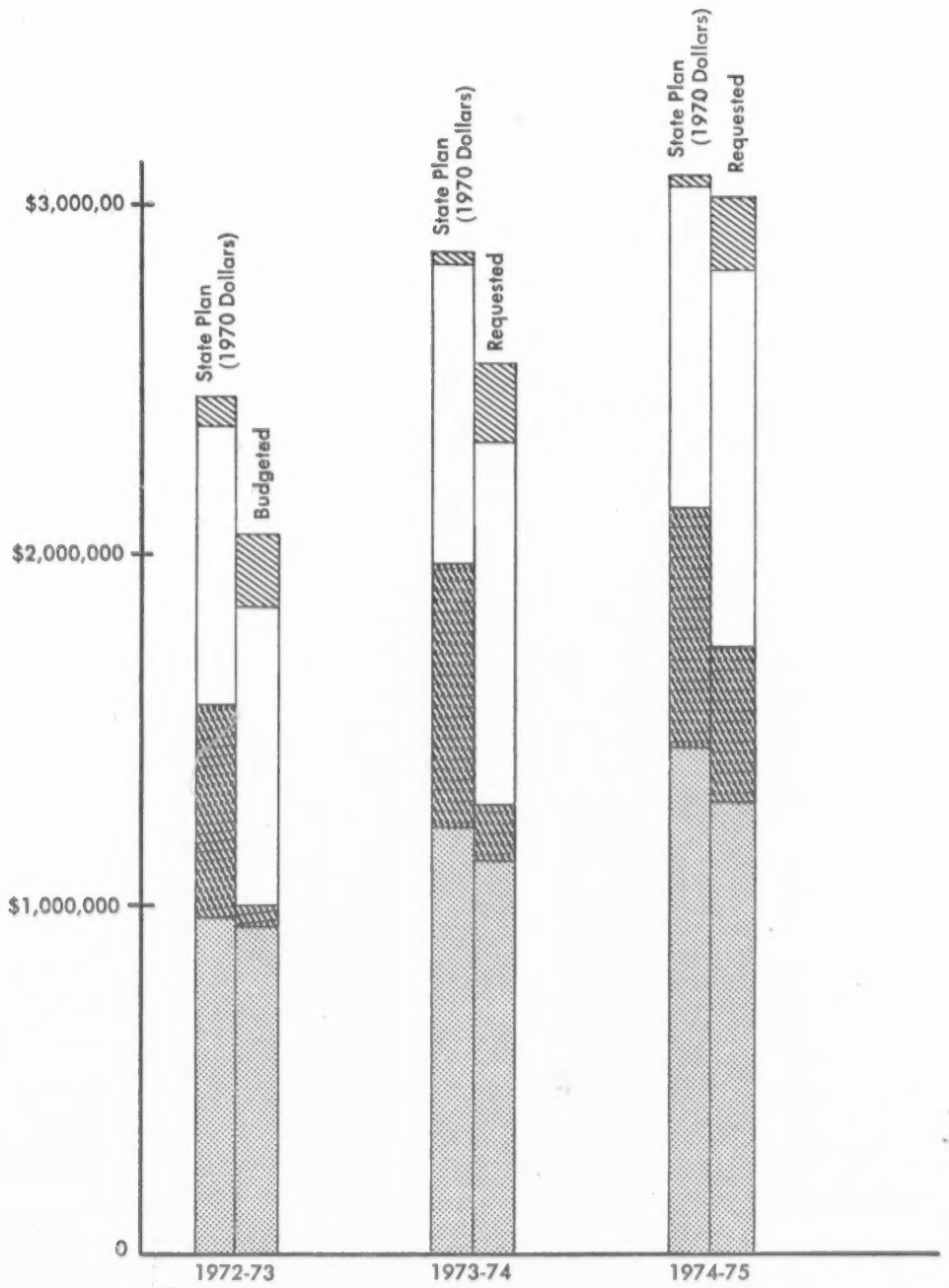


FIGURE 1: COMPUTING BUDGETS, UNIVERSITY OF MINNESOTA

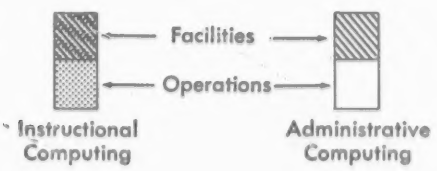


Table 2

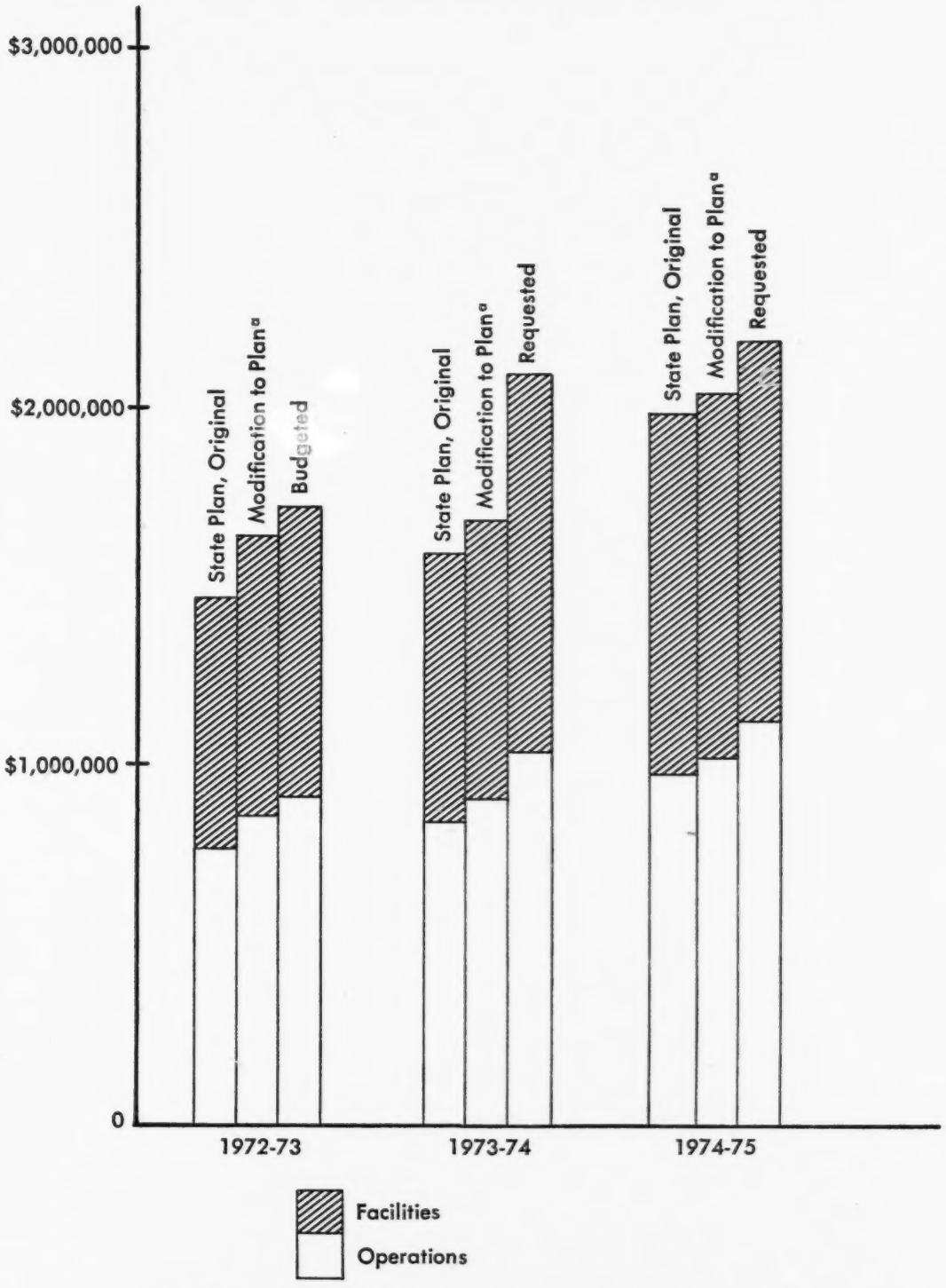
COMPUTING BUDGETS, STATE COLLEGE SYSTEM

	1972-73			1973-74			1974-75		
	Original State Plan[a]	Modification of State Plan[b]	Budgeted	Original State Plan[a]	Modification of State Plan[b]	Requested	Original State Plan[a]	Modification of State Plan[b]	Requested
Facilities	$ 699,600	$ 783,000	$ 802,663	$ 740,100	$ 780,500	$1,048,801	$1,008,600	$1,024,000	$1,065,880
Operations	783,440	867,000	924,171	854,600	917,500	1,039,123	983,880	1,024,000	1,124,480
TOTAL	$1,483,040	$1,650,000	$1,726,834	$1,594,760	$1,698,000	$2,087,934	$1,992,480	$2,048,000	$2,190,370

[a]All State Plan estimates are in 1970 dollars.

[b]The State Plan modified to reflect the decision to accelerate the planned upgrading of the St. Cloud facility and the need to upgrade Bemidji to third generation computing capability.

FIGURE 2: COMPUTING BUDGETS, STATE COLLEGE SYSTEM



[a]The State Plan modified to reflect the decision to accelerate the planned upgrading of the St. Cloud facility and the need to upgrade Bemidji to third generation computing capability.

Table 3

COMPUTING BUDGETS, STATE JUNIOR COLLEGES

	1972-73		1973-74		1974-75	
	State Plan[a]	Budgeted	State Plan[a]	Request	State Plan[a]	Request
FACILITIES						
Administrative	$125,000	$133,060	$125,000	$158,400	$125,000	$173,400
Instructional	121,200	61,836	178,800	93,256	236,300	136,156
TOTAL	246,200	194,896	303,800	251,656	361,300	309,556
OPERATING SUPPORT						
Administrative	80,000	108,576	105,000	132,388	145,000	158,064
Instructional	33,494	43,724	49,941	56,016	66,388	81,016
TOTAL	113,494	152,300	154,941	188,404	211,388	239,080
GRAND TOTAL	$359,694	$347,196	$458,741	$440,060	$572,688	$548,636

[a]All State Plan estimates are in 1970 dollars.

FIGURE 3: COMPUTING BUDGETS, JUNIOR COLLEGE SYSTEM

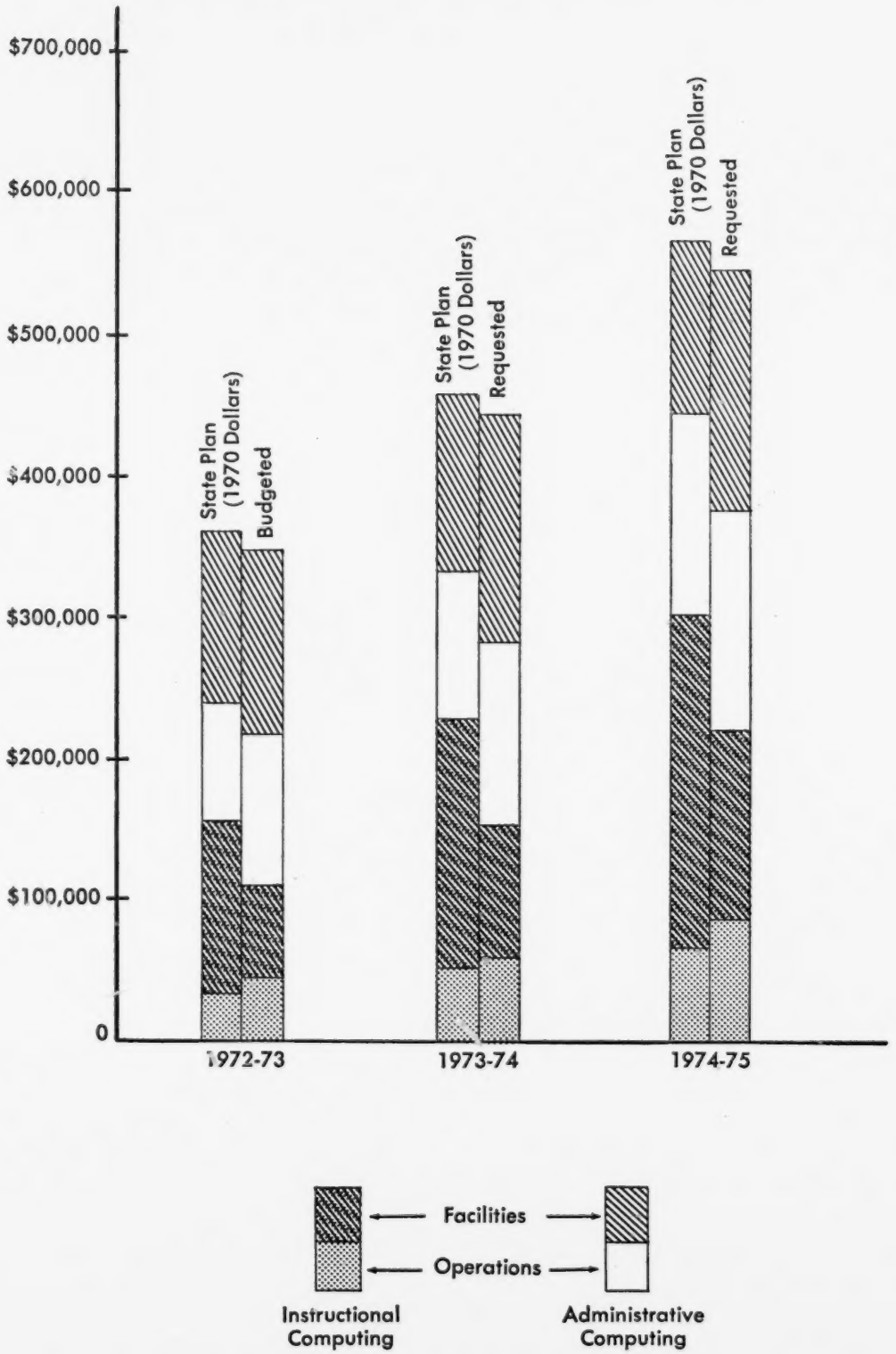


Table 4

COMPUTING BUDGETS, PRIVATE COLLEGES TOTAL FOR 1972-73 ONLY

	1972-73 Budgeted[a]
Facilities	
Administrative	$211,305
Instructional	81,777
TOTAL	$293,082
Operations	
Administrative	372,515
Instructional	169,475
TOTAL	$541,990
GRAND TOTAL	$835,072

[a]Only budgeted figures are available for the private colleges since the State Plan did not include estimates for private college spending on computers and information systems.

IV. Overall Summary of 1973-75 Budget Requests

In Table 5 and Figure 4 are summarized the total requests from public higher education (not including the area vocational-technical institutes). These are compared in each case with projections from the State Plan. These displays also show the effects of an estimated 5 percent inflation of the State Plan projections for 1973-75, (the State Plan used 1970 dollars and took no account of inflation). From the standpoint of costs, it can be seen that the total funds expended and requested, when inflation is considered, are somewhat below the State Plan recommendations — it has been possible to save money over these recommendations while still making significant progress toward the functional goals of the plan. Each of the systems of public higher education plans to have available by 1975 administrative computing capacity equivalent to that recommended by the State Plan. All of the administrative applications envisioned may not be implemented by 1975 (though a large fraction will be). For educational computing, the University and State College Systems are progressing well according to the plan recommendations. They will each have the capacity to serve their students near the level recommended in the plan by 1975 if the budget requests can be funded. The junior colleges, on the other hand, will be functioning in 1975 at about half the level recommended in the State Plan. This reduction is based on the experience of the past two years, which has shown that, due to the dispersed nature of the system and the small size of many of the colleges, it is more difficult to educate the faculty and develop the instructional materials and applications for use in the junior colleges compared with the larger four-year institutions. The level of instructional computing proposed for the junior colleges is consistent with their needs as projected for the 1973-75 biennium, and a more significant amount of resources is being requested by the State Junior College Board to assist the junior colleges and their faculty in using the instructional computing services effectively in their academic and career-oriented programs.

V. Inter-System Recommendations for Implementation Through the Higher Education Coordinating Commission

In carrying out its review of progress over the past biennium and budgets and plans for the next two years, the Computer Advisory Committee recognized several problems which could not easily be solved by the publicly-supported systems of post-secondary education themselves. The four recommendations below, which will require implementation and funding through the Higher Education Coordinating Commission, are presented as a suggestion for dealing with some of these problems. The Committee hopes that the Commission will give these recommendations serious consideration.

(1) *The establishment, within the Higher Education Coordinating Commission office, of a position of Coordinator of Post-Secondary Education Computing*

Though Minnesota has made a great deal of progress in coordinating its activities in computing in higher education, there is a need for more effective and continuing exchange of information between Minnesota institutions and with other institutions and organizations in the nation. Further, there is a need for more regular, continuing support of the time-consuming coordination activities which are necessary within Minnesota to implement the mechanisms established by the State Plan and to assist in the collection and organization of the information which is required for those mechanisms to work smoothly and effectively. During the past year, the coordination has been effected with excellent part-time assistance from the Commission staff and by dint of much hard work on the part of several COMPAC members. This effort will inevitably grow, and is more than can be sustained on a continuing basis by COMPAC members in addition to their regular institutional and system responsibilities. Therefore, COMPAC recommends the establishment of a staff position within the Commission to serve the needs of all post-secondary education by collecting and disseminating information among institutions in Minnesota and between Minnesota and programs in other states and nationwide; and by managing and supporting the activities of the Computer Advisory Committee and its working subcommittees (at present the Technical Standards Subcommittee and the MERITSS Policy Advisory Committee). The level of funding required for this position should be determined by the Executive Director of the Commission.

Table 5

TOTAL COMPUTING BUDGETS OF PUBLIC HIGHER EDUCATION COMPARED WITH STATE PLAN[a]

	1972-73		1973-74		1974-75	
	State Plan	Budgeted	State Plan	Request	State Plan	Request
University of Minnesota.....	$2,461,900	$2,064,000	$2,861,000	$2,574,513	$3,072,000	$3,051,994
State College System.....	1,650,000[b]	1,726,834	1,698,000[b]	2,087,934	2,048,000[b]	2,190,370
State Junior College.....	359,694	347,196	458,741	440,060	572,688	548,636
TOTAL	$4,471,594	$4,138,030	$5,017,741	$5,102,507	$5,692,688	$5,791,000
(Inflation effects of 5 percent)..			($250,887)		($284,634)	

[a]All State Plan estimates are in 1970 dollars.

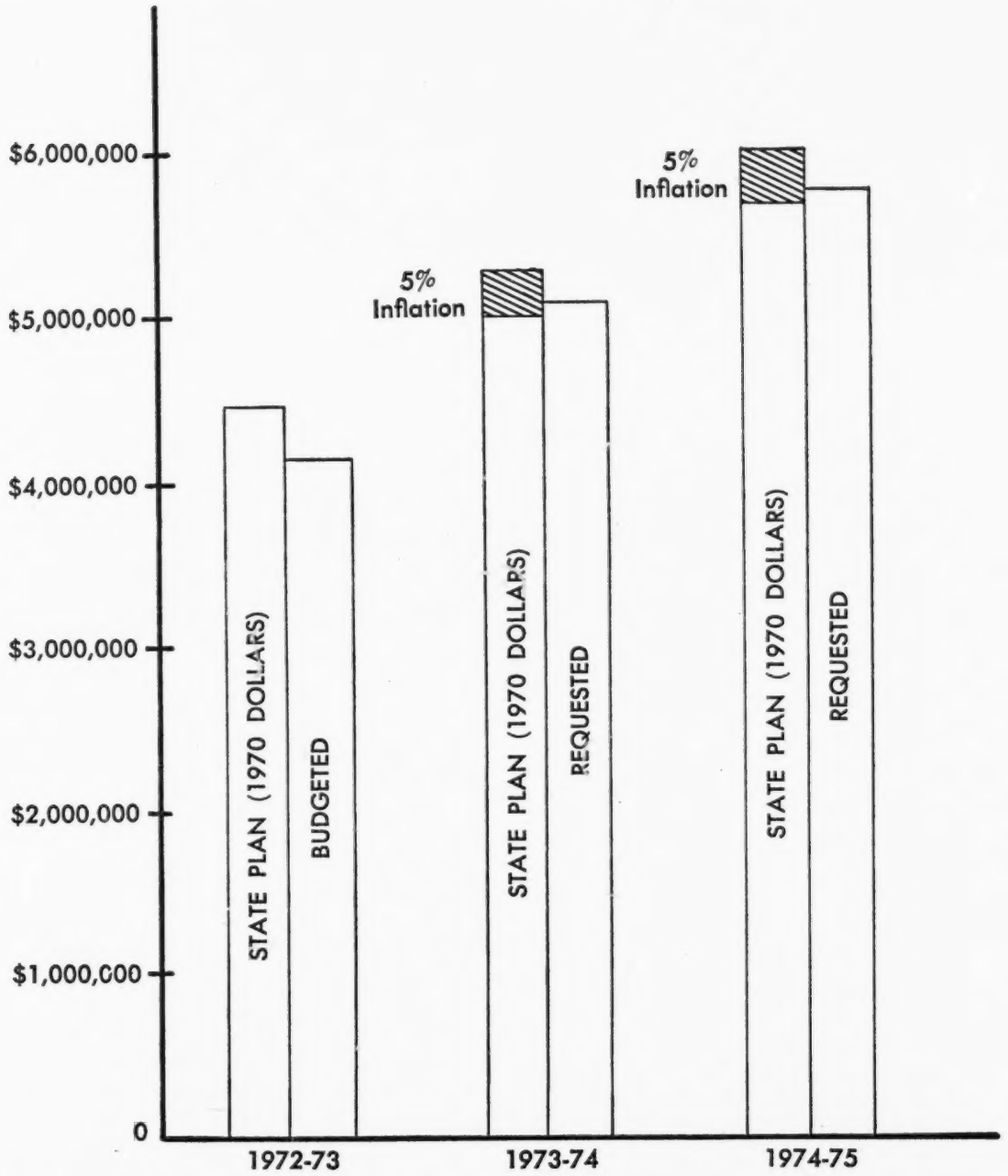
[b]The State College System line uses the State Plan modified to reflect the decision to accelerate the planned upgrading of the St. Cloud facility and the need to upgrade Bemidji to third generation computing capability.

(2) *The establishment of a fund for the reimbursement of non-publicly funded private colleges providing staff or facilities for use in statewide projects*

Over the life of the Computer Advisory Committee and other similar coordination activities, staff members from private colleges have made *major* contributions to the planning and programs that have developed. They have done this at considerable expense to their institutions and to their personal lives. Because of limited funds and staff, at least two individuals from private colleges have been asked by their administrations to limit or terminate their participation in statewide coordination activities. The Computer Advisory Committee feels that the state cannot afford to be without the expertise and the viewpoints that reside within the private colleges. Therefore, they recommend the establishment of a fund within the Higher Education Coordinating Commission to reimburse private colleges for the services of their staff members as consultants or major participants in coordination activities, and for the use of their facilities, when these services and facilities will benefit all of Minnesota higher education. The level of funding suggested is:

1973-74: $15,000
1974-75: $20,000.

FIGURE 4: COMPUTING BUDGETS, PUBLIC POST-SECONDARY EDUCATION IN MINNESOTA (OMITTING AREA VOCATIONAL-TECHNICAL INSTITUTES)



NOTE: State Plan (1970 Dollars) reflects modifications for acceleration toward State College System planned goals.

(3) *The establishment of a fund to support the use of the statewide time-shared computer facility for research and development projects, innovative instructional usage, or ongoing activities*

Many institutions of post-secondary education are in need of time-shared computing facilities to enhance the quality of and supplement current programs, and to establish new programs of quality education to meet developing needs. However, many institutions simply lack the funds to meet these goals, knowing how recognizable and worthy they may be. This is especially true for the private colleges. To meet this need, it is recommended that a fund be established to provide 50 percent matching grants for computer time (port charges) on the statewide time-shared computing facility (MERITSS). These grants would not support costs of terminal equipment and communications. They would be awarded on the basis of the merits of proposals submitted and the consideration of previous legislative funding to the requesting institutions. The proposed level of funding is:

1973-74: 10 ports @ $3,000/yr. × 50% = $15,000

1974-75: 20 ports @ $3,000/yr. × 50% = $30,000.

(4) *Subsidies for computing costs incurred by private colleges for instructional and administrative computing utilizing publicly-supported facilities*

Since the private sector accounts for 25 percent of all students in Minnesota higher education, it is important that the quality of education and the quality and quantity of computing services be near the same level as in the public systems. It has been indicated elsewhere in this report that, although the private colleges collectively are spending a substantial amount of money on computing, they are not, in general, achieving a level of computing services equivalent to that in the public institutions. The purpose of this recommendation is to provide assistance which will be necessary to some colleges if they are to have access to adequate computing services for their students, and to provide an incentive to use shared facilities in the public sector which ultimately will be less expensive for all concerned. It is proposed that these funds be distributed in the form of grants covering no more than 50 percent of the computer service costs, not including terminal equipment and communications. A similar recommendation in the 1970 State Plan, for $35,000, $70,000, $105,000 and $140,000 respectively for the years 1971-72 through 1974-75, was not funded. The level of funding recommended by COMPAC is:

1973-74: $35,000

1974-75: $50,000.

APPENDIX S

COMPUTER REVIEW GUIDELINES

GUIDELINES FOR REVIEW OF COMPUTER FACILITIES IN MINNESOTA HIGHER EDUCATION

I. Introduction.

In 1970 an intensive study of the use of computers in Minnesota post-secondary education was carried out as part of an overall study of State Information Systems sponsored by the Governor's Advisory Committee on Information Systems. The study resulted in a report, *Computers and Information Systems in Higher Education, 1970-1980,* which suggested that the requirements for instructional, research, and administrative computing and data processing in post-secondary education can be met most effectively through implementation of a long-range plan for cooperative planning and utilization of computers. The Minnesota Higher Education Coordinating Commission endorsed this suggestion and adopted a policy statement (see the Appendix) which, taken with other recommendations in the report and legislation passed by the 1971 Legislature, defined for the Commission five responsibilities:

(1) Responsibility for the development of plans and policies for assuring coordinated and efficient development of the use of computers and related information systems in higher education and recommending implementation thereof to the Commissioner of Administration (Chapter 918, H.F. 2166, Section 3. [16.92])

(2) Preparation for each session of the State Legislature of a report on computing activities and facilities in post-secondary education during the previous biennium, indicating how their evolution has been consistent with or deviated from the long-range plan and how that plan should be modified for the future.

(3) Preparation for each session of the State Legislature of a summary of the proposed computing budgets of each of the four publically-supported systems of post-secondary education, along with a plan for the development of computing facilities and services over the next biennium.

(4) Review and make recommendations on proposals for establishing new computing facilities in the publically-supported institutions of post-secondary education.

(5) Establishment of technical standards for computer hardware and software — especially that connected with remote communications between computers and terminals — to facilitate sharing and exchange of facilities and services among the institutions of the state.

The Commission has requested the Computer Advisory Committee to assist in the responsibility for preparing these reports, reviews and standards. This Committee is constituted of two members each representing the University of Minnesota, the State College System, the state junior colleges and the area vocational-technical institutes, and the private colleges of the state, plus one representative from the State Department of Administration and one from the Governor's Advisory Committee on Information Systems. This document contains the Guidelines for reviewing proposals for new computing facilities (item 4 above).

The computing facilities subject to review by the Computer Advisory Committee shall include all new computers and computer systems acquired after April 1, 1972, by publically-supported institutions of post-secondary education in Minnesota. Significant changes in and additions to system configurations, as well as remote terminals with no significant stand-alone computing capability, will not be subject to complete review. However, institutions and systems planning to acquire such devices are expected to notify the Committee. Special-purpose research computing facilities which receive no support from units of state or local government are not included in this review procedure. It is expected that private colleges will participate in the review procedure in much the same way as the publically-supported institutions.

The purposes of the facilities review procedures outlined here are several:

—To ensure adequate access by students and faculty to the computing facilities and services required by the programs in which they are involved;

—To ensure adequate administrative data processing and management information services for operating the institutions, for improving and understanding their operations, and for providing adequate information to governing and coordinating boards and the executive and legislative branches of government to assist them in making wise management and funding decisions;

—To ensure the orderly and coordinated development of these necessary services throughout post-secondary education without unnecessary duplication;

—To ensure consistency with long-range planning and to assist in modifying the long-range plans to properly account for changes in technology and programs; and

—To assist institutions and systems of post-secondary education to obtain these necessary services in the most effective and economical way by sharing technical expertise in the development of functional technical specifications for the facilities or services needed and reducing reliance on vendors for information and technical advice.

In other words, the purpose of the review procedure is not arbitrarily to control or restrict the establishment of computing facilities, but to help, inform, coordinate, and share facilities to provide most efficiently and economically the services that are required for academic programs and institutional operations and management.

II. Procedures.

A. Preliminary Notification

A Preliminary Notification of the need for the services of a computing facility should be filed with the Commission as soon as that need has been established, its potential funding sources identified, and its general characteristics and alternative sources of service identified. The purpose of this notification is to inform and alert the Commission, the other institutions and systems, and affected agencies of state government; to make appropriate technical help available when it is needed in dealing with vendors and evaluating their proposals; and to properly articulate academic computer facilities with the Program Review function of the Commission. In the case of facilities associated with a new program, the Preliminary Notification will usually accompany the Program Proposal submitted to the Curriculum Advisory Committee. Since the Preliminary Notification is intended to provide information about the need for services of a particular type, it does not assume a final commitment by the submitting institution or system to establish the facility, nor does it imply full approval by that institution's or system's governing board. It does, however, assume authorization by the governing board for transmitting the Preliminary Notification. While each of the governing boards will establish its own procedures, the Commission would prefer that Preliminary Notification be transmitted through the central office of the system.

The Preliminary Notification need not follow any specified format — it can be as brief or as detailed as the submitting institution feels appropriate. However, it should include the following information:

(a) The need for services of a computing facility of specified magnitude.

(b) A functional description of the services to be performed.

(c) Alternative means or facilities to provide these services: This statement of alternatives should include estimated costs of each alternative, including staff support.

After review by Commission staff to ensure that adequate information is provided, Preliminary Notifications will be accepted by the Computer Advisory Committee and transmitted to the Technical Standards Sub-Committee for detailed review and recommendation to the Computer Advisory Committee and the submitting institution. Comments, suggestions, and questions arising from this consideration will be transmitted promptly to the submitting institution.

B. Formal Proposal

When detailed planning for a new computer facility has been completed and tentative approval given by the institution's governing board or appropriate board committee, a Formal Facility Proposal should be submitted to the Commission. The purpose of the Formal Proposal is to collect in one document all of the necessary information required to reach a sound decision on the relationship of the proposed facility to the long-range planning for computer facilities and the needs of the state. More specifically, the Formal Proposal should include statements on the following points:

(a) The need for the facility, with appropriate documentation (this will include an appended copy of the approved Formal Program Proposal to which the facility is related if applicable);

(b) All services to be provided by the facility to the institution submitting the proposal and to other institutions, both immediately and anticipated over a five-year period;

(c) A narrative description of the facility, covering hardware, software, and communications capability to be provided

initially, and expansions or changes anticipated over a five-year period;

(d) The number of students, faculty members, and others to be served initially and over a five-year period;

(e) Relationships between the proposed facility and other computing facilities available to Minnesota higher education;

(f) Relationships between the proposed facility and the long-range plan for computers in Minnesota higher education, mentioning how the two are compatible, how they differ, and justification for the differences;

(g) Additional staffing implied by the proposal, (including both academic and support staff), initially and over a five-year period;

(h) Other non-computer and building space implications of the proposal;

(i) Total estimated costs of the proposed new facility, initially and over a five-year period, including all capital costs, rentals, maintenance, supplies, additional staff, and other related facilities;

(j) Anticipated sources of funds to meet these costs, initially and over a five-year period;

(k) Detailed technical specifications on which vendors will be expected to make formal quotations.

Commission staff will review formal proposals to ensure that all necessary information is included. The staff will then transmit copies to members of the Computer Advisory Committee. Normally, the Committee will receive a proposal for discussion at its next meeting following this transmission, and will make formal recommendation to the Commission at the following meeting. This normal review procedure by the Committee will therefore require between one and two months. For cases in which the computer market or institutional schedules require faster action, the Commission staff and the Committee will do their best to compress this time scale.

The recommendation of the Computer Advisory Committee will be transmitted to the Higher Education Advisory Committee for information and to the Commission itself for approval, disapproval, or other action. Institutions and systems will be expected to withhold any binding commitment of funds to the facility until after the Commission has acted.

III. **Criteria for Evaluation.**

Each proposed facility will be judged in terms of the following basic criteria:

(1) Importance to the academic programs and/or administrative needs of the institution or system;

(2) Consistency with the long-range State Plan for computers in higher education as most recently modified, and with any other state planning guidelines which may have been accepted by the Higher Education Coordinating Commission; if the proposed facility is not consistent with these plans, the reasons should be clear and justified;

(3) Cost-effectiveness of the proposed facility relative to other alternatives which could provide adequate computing service;

(4) Quality of the technical specifications for the facility in defining tightly the necessary functional characteristics of the proposed facility, omitting unnecessary features, and placing appropriate minimum and maximum boundaries on systems which may be proposed by vendors.

IV. **Appendix: General Policy Statement Adopted by the Higher Education Coordinating Commission in September 1970.**

IV. APPENDIX

The links between institutions and systems implied by the preceding recommendations will require a high degree of coordination in developing the facilities and organizations required to achieve an effective and efficient educational computing capacity in the state. To bring about this coordination, the Minnesota Higher Education Coordinating Commission has based its approval of this Report on the following statements of general policy:

1. All institutions and systems of higher education, prior to the development of their legislative requests, shall identify to the Higher Education Coordinating Commission their plans for computing for both facilities and for operating costs. These plans should provide detailed information on budgeted costs and program justification. The Commission shall review these proposals to determine how these plans are coordinated with the Master Plan — how they approximate the goals and where they deviate from them. The Commission shall prepare a Summary Report for each Legislature on the progress that has been made toward achieving the goals of the Master Plan. This Summary Report also shall include recommendations regarding the requests which are being submitted by the institutions and systems, and by the Commission itself.
2. For on-going or operational computing activities, the responsibility for planning and for preparing legislative requests shall rest with the individual systems of higher education. Funding will be appropriated to the individual systems.
3. The Computers and Information Systems in the Higher Education Report identifies four programmatic areas of a developmental nature. These are:
   (a) a development center for Computer-Assisted and Computer-Managed Instruction.
   (b) a statewide automated library system.
   (c) a program of grants for projects in research and in development, within each biennium, related to computing in higher education (continuation of an existing program).
   (d) grants to private colleges in support of their computing activities.

   For these four developmental activities, the responsibility for planning shall rest with the Commission. For grants program (c and d above) the Commission will also prepare the legislative requests and receive the appropriations. For activities which involve both new facilities and operating support (a and b above), the legislative requests will be prepared jointly by the Commission and those individual systems which plan to make use of the facilities. Appropriations for facilities will be made to the Commission; appropriations for operating costs associated with the developmental activities themselves will be made to the appropriate system or agency, including the Commission itself. The Commission may assign management responsibility for the facility to another board or agency.
4. Adjustments in implementation plans presented to the Legislature in accordance with procedures outlined in Number 1 above shall be subject to review by the Commission.
5. The Commission proposes to review periodically the effectiveness of the policies being adopted here and to make or recommend such changes as it deems advisable.

Adopted by the Executive Committee
of the Minnesota Higher Education
Coordinating Commission
September 17, 1970

SOURCE: Minnesota Higher Education Coordinating Commission, *Computers and Information Systems in Higher Education Part of Information Systems in the State of Minnesota, 1970-1980* (St. Paul: Minnesota Higher Education Coordinating Commission, September, 1970), p. 4-61.

APPENDIX T

ST. PAUL RAMSEY HEALTH EDUCATION REPORT

ADVISORY COMMITTEE ON MEDICAL EDUCATION PROGRAMS AT ST. PAUL-RAMSEY HOSPITAL

Report to the Vice President for Health Sciences,
University of Minnesota

J. PETER DEVINE, SECRETARY
Office of Secretariat

MINNESOTA HIGHER EDUCATION
COORDINATING COMMISSION
550 Cedar Street
St. Paul, Minnesota 55101

NOVEMBER 1972

ADVISORY COMMITTEE ON MEDICAL EDUCATION PROGRAMS AT ST. PAUL-RAMSEY HOSPITAL

Report to the Vice President for Health Sciences, University of Minnesota

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OF COUNSEL

December 8, 1972

Dr. Lyle A. French, M.D.
Vice President
Office of Vice President for Health Sciences
432 Morrill Hall
University of Minnesota
Minneapolis, Minnesota 55455

Dear Dr. French:

On behalf of the Advisory Committee on Medical Education Programs at St. Paul-Ramsey Hospital, I herewith submit the Committee Report pursuant to Minnesota Statutes 1971, Chapter 851.

The Report summarizes the Committee deliberations and provides several recommendations germane to the Legislature's charge in establishing the Committee. I am pleased to inform you that these recommendations received the unanimous consent of the Committee members, as well as support from several affected organizations as noted among the documents which accompany the Report.

As you know, the Statute provides for transmittal of the Report to the Regents and ultimately to the 1973 Legislature through your good offices. Mr. J. Peter Devine of the Higher Education Coordinating Commission served well as Secretary to the Committee. He is prepared to forward as many copies of the Report as you require, including copies of the supporting documents.

I am confident that I speak for each member of the Committee when I say that we are at your disposal and that of the Regents and Legislature to testify and comment on the substantive issues addressed by the Committee in this Report.

The Committee joins me in expressing gratitude to you personally for your continuing interest in the issues of concern to the members, and for taking occasion to share your valuable insight.

Sincerely yours,

RICHARD A. MOORE, Chairman

RAM:gb
Enclosures

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HIGHER EDUCATION
COORDINATING COMMISSION

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OFFICE OF THE EXECUTIVE DIRECTOR

December 8, 1972

Dr. Lyle A. French, M.D.
Vice President
Office of Vice President for
Health Sciences
432 Morrill Hall
University of Minnesota
Minneapolis, Minnesota 55455

Dear Dr. French:

This is to advise you that the report of the St. Paul-Ramsey Medical Advisory Committee was presented at the December 1 meeting of the Higher Education Coordinating Commission and that the Commission took official action to receive the report.

You should also be advised that following discussion of the Committee's report, the Commission passed the following motion:

> In view of the initial success of the experiment involving St. Paul-Ramsey Hospital, the Commission recommends that Hennepin County General Hospital be encouraged to develop parallel plans as recommended to the 1971 Legislature.

Your cooperation and the cooperation of other members of your staff with the Commission, as secretariat of the Committee, has been most appreciated. As always the Commission stands ready to assist the University Administration and the Board of Regents in addressing the Committee's recommendations.

Sincerely,

RICHARD C. HAWK
Executive Director

RCH:gb

SUMMARY AND RECOMMENDATIONS

The Advisory Committee on Medical Education Programs at Saint Paul-Ramsey Hospital responded to the legislative intent in Minnesota Laws 1971, Chapter 851 by serving as convener, moderator, monitor, reviewer and evaluator in a scope of legislation which encompassed:

—appropriations to relieve the hospital patient of educational costs, and a request that the Regents give separate identity to the Hospital's health education programs;

—appropriations to encourage development by the University Regents of a core of educational programs from which a full range of health education programs could be developed in the Hospital, and in particular a core consisting of post-graduate medical education and family practice;

—an invitation to the University Regents and the County Hospital Commission mutually to develop and implement novel administrative arrangements demonstrating the feasibility of collaboration for the purposes mentioned; and

—a similar invitation to develop and implement novel administrative arrangements with other area and rural health facilities demonstrating the feasibility of collaboration for the same purposes on a wider geographic scale.

In its brief life the Committee could do little more than encourage and monitor the experimental steps in what is perforce a lengthy journey in unplotted territory.

The Committee is firmly convinced, however, that all affected parties have generously participated in careful initial steps and that they have demonstrated the ultimate feasibility of novel arrangements in delivery of all types of formal health education programs. The Committee is also convinced of the continuing need for the functions it was established to perform.

Therefore, the Committee recommends:

1. Review and Evaluation of Programs (851, Subd. 6)

Although a number of specific programs were evaluated and inventoried, the review and evaluation charge remains partially fulfilled at the present time. The Committee believes this function is viable and necessary and *recommends the continuation of this Committee for another two-year period with supporting services provided again by the Higher Education Coordinating Commission.*

2. Administration of Medical Education Programs at Saint Paul-Ramsey Hospital (851, Sec. 1)

The Committee can report its general satisfaction with progress in this area which appears to be consistent with the legislative intent. The Committee makes the following specific recommendations:

a. Improved communication and better working relations between the University department heads and the Saint Paul based faculty are desirable and the present efforts in this direction should be encouraged.

b. Improved communication and better working relations between the Ramsey County Hospital and Sanitarium Commission, its administrative officers and the Saint Paul based University faculty are desirable and the present efforts in this direction should be encouraged.

c. Improved communication and better working relations between the Ramsey County Hospital and Sanitarium Commission, its administration and the University Health Sciences representatives through the mechanism of the Joint Education Council is desirable and the present efforts in this direction should be encouraged.

The Committee remains keenly aware of the critical nature of negotiations in each of these areas so that educational development may be accomplished according to legislative intent. The Committee *recommends and urges a continued monitoring of this progress through the aforesaid continuation of the Committee.*

3. Planning and Development of Medical Education at Saint Paul-Ramsey Hospital (851, Sec. 1)

The Committee reviewed the development of the Saint Paul-Ramsey Hospital based faculty organization and approves proposals to expand it to other Saint Paul based University faculty. The Committee reviewed the plans for the future development of the program in education of Family Physicians and *recommends continued financial support of this program by the Legislature.*

The Committee reviewed the proposal to relocate the Gillette State Hospital to the Saint Paul-Ramsey Hospital site. It noted that although such a move would have many advantages from the standpoint of economy and service it would also provide an unusual opportunity to expand the health science education role of both institutions at minimal cost. The Committee *recommends that the Legislature finance its share of the expenses involved.*

The 1971 Legislature appropriated funds to the University of Minnesota for undergraduate medical education at Saint Paul-Ramsey Hospital. The Committee reviewed the allocations of these funds by the University and determined they were made in ac-

cordance with legislative intent. The principle was established that funds were allocated where the students are being educated. The Committee *recommends continued financial support of undergraduate medical education at Saint Paul-Ramsey Hospital by the Legislature.*

4. Possible Utilization of Other Saint Paul Area Hospitals and Health Institutions and Existing Regional Rural Hospitals, Clinics and Physicians (851, Subd. 3)

The Committee examined and stimulated discussion about the feasibility of utilizing area health institutions to develop a coordinated cooperative health education effort in association with the programs at Saint Paul-Ramsey Hospital. One of the main items of discussion was the need for additional state funding which must be made available on an equitable basis. The discussions made it clear that such a consortium cannot be imposed by the University but must be the result of voluntary participation by the appropriate groups organized in a democratic manner. Since there is currently no overall cooperation and coordination of the health science education programs of the facilities in the area, there needs to be established a mechanism whereby communication and coordination between University and area health facilities are accomplished so that unnecessary duplication of effort is avoided, maximum utilization of facilities is achieved, and University Health Science education programs are carried out with maximum economy.

To further this end the Committee *recommends that the Legislature fund a Saint Paul-based University official to coordinate and develop health science programs.*

The Committee is convinced that the functions it sought to serve are essential for orderly development of health science education programs in Saint Paul and *recommends to the Legislature that these functions be preserved.*

Legislative Charge

MINNESOTA LAWS 1971, CHAPTER 851

Subd. 6. ". . . an advisory committee is hereby appointed to evaluate and review the medical education programs at St. Paul-Ramsey Hospital, including future expansions thereof authorized by this act, and submit a report thereof to the vice president for Health Sciences at the University of Minnesota who will report to the President and the Board of Regents. The Board of Regents shall submit its comments, together with those of the advisory committee, to the legislature on or before January 15, 1975. . . . The advisory committee will remain in operation no longer than June 30, 1973.

Sec. 2. This act is in effect on July 1, 1971, subject, however, to the conditions set forth in section 1.*"

Introduction

The Advisory Committee on Medical Education Programs at St. Paul Ramsey Hospital was established by the 1971 Legislature effective on July 1, 1971, and operative until June 30, 1973.

Membership of the Advisory Committee was duly established according to law (see Document 22), and on November 9, 1971, the first meeting was announced by the Executive Director of the Higher Education Coordinating Commission (see Document 19). At its first meeting the Advisory Committee appointed a Chairman, Mr. Richard A. Moore of St. Paul (Laws 1971, Chapter 851, Subd. 6). The Higher Education Coordinating Commission had appointed Mr. J. Peter Devine as Secretary, and provided professional staff (Chapter 851, Subd. 6).

The Advisory Committee held formal meetings on*:

1. November 24, 1971
2. December 28, 1971
3. January 28, 1972
4. July 7, 1972
5. August 18, 1972
6. November 15, 1972
7. November 28, 1972

The August meeting took the form of a hearing to ascertain the responses of east-metropolitan hospitals to a proposal to develop cooperation and coordination as an area health sciences campus.

In addition, the Advisory Committee stimulated several informal meetings on this and other proposals.

In brief, the work of the Advisory Committee principally concerned these major items:

1. the role of the Advisory Committee,
2. review and evaluation of programs (851, Subd. 6),
3. administration of medical education programs at St. Paul-Ramsey Hospital (851, Sec. 1),

---

*Before July 1, 1971, both the Regents and the Ramsey County Commissioner were to formally advise the State Auditor of compliance with a legislative request to provide and gradually develop health sciences education cooperatively.

*See Minutes in Exhibit A.

4. planning and development of medical education programs at St. Paul-Ramsey Hospital (851, Sec. 1),

5. possible utilization of other St. Paul area hospital and health institutions and existing regional rural hospitals, clinics, and physicians (851, Subd. 3).

The Advisory Committee also concerned itself with the legal responsibility in utilization of funds appropriated by the 1971 Legislature. Although the Advisory Committee did not consider this issue as directly related to its role, it satisfied itself that the legal responsibilities were adequately accounted for.

1. Role of Advisory Committee

The relevant legislation referred to "medical education programs" and to "a gradual development of health science education activities" (Chapter 851, Subd. 1, 4) at St. Paul-Ramsey Hospital.

The former denoted education of physicians and principally graduate physicians because reference was made (Subd. 2) to "training of persons primarily interested in patient care" and to expansion and proper funding of the health science activities that were in use at St. Paul-Ramsey Hospital by the Regents of the University.

The latter denoted the full range of health science education including undergraduate medical (Subd. 4) because the Legislature stated its desire for expansion in terms of "nurses and various technical specialists, as well as undergraduate and graduate medical students."

Wtih respect to the Advisory Committee, the operative part of the legislation appointed the Committee "to evaluate and review the medical education programs at St. Paul-Ramsey Hospital, including future expansion thereof authorized by this act" (Subd. 6), and "submit a report to the Vice President for Health Sciences." Thus the charge to the Advisory Committee covered the full range of existing and contemplated health science education programs at St. Paul-Ramsey Hospital.

Other operative parts referred explicitly to the Regents and to the Ramsey County Hospital and Sanatorium Commission. The Regents (1) received an appropriation "for the on-site administration, planning and development of medical education programs (Subd. 1), and were requested (2) to "expand health science education at St. Paul-Ramsey Hospital (Subd. 2), (3) to act "in cooperation with the Ramsey County Hospital and Sanatorium Commission" (Subd. 3), and (4) to utilize, if possible, other St. Paul area health institutions and rural hospitals, clinics and physicians (Subd. 4). The appropriation would be available only when the University formally acceded to the requests and the hospital commission formally agreed to cooperate with the Regents (Subd. 5).

These formal actions were duly accomplished (see Document 23).

Because the full-range charge to the Advisory Committee included future expansions, its role encompassed development of medical and health education programs to be planned and administered on-site by the Regents, as well as cooperation between the Regents and the County Commission and utilization of area and rural health facilities. In this regard, the Advisory Committee could serve as a stimulus and convener toward implementation of cooperation and utilization.

2. Program Review and Evaluation (851, Subd. 6)

The Committee found that its review/evaluation role was perforce of less importance than that of stimulus and convener at this time for several reasons:

a. The legislation focused immediate attention only on existing programs and only insofar as they involved graduate education of physicians, particularly family practice physicians.

b. Plans for expansion into programs for undergraduate medical students, baccalaureate nurses and allied health personnel were not current in a form that could be addressed by the Advisory Committee.

c. Existing programs could not be studied adequately without paying simultaneous attention to such expansion plans.

d. Indeed none of these issues could be reviewed and fully evaluated during the life-span of the Committee prior to acceptable implementation of the legislative prescriptions.

e. In addition, during this period the County Commission was taking steps to reorganize the internal structure of hospital administration so that it might better accommodate its own needs and those imposed by the legislation requiring that the hospital become in effect a health science campus and perhaps the focal point of an area-wide health science campus.

Nevertheless, the Advisory Committee can report several activities consistent with the program review portion of its charge.

First, the Committee reviewed documents relating to medical education programs at Duluth and Rochester, as well as the Higher Education Coordinating Commission 1971 recommendations on medical education (Documents 1, 2, 3).

Second, the Committee heard reports with supporting documents on the Family Practice program and on

other physicians' education programs at St. Paul-Ramsey Hospital (see Minutes 12/28/71; 1/28/72 and Documents 4, 7, 9). There was general approval of the progress reported.

Third, in relation to out-state and rural programs the Committee expressed approval for NAME's plan to present its proposal to the Educational Policies Committee of the University (see Documents 8, 20, **Regional Medical and Allied Health Education Centers** and minutes 1/28/72).

Finally the Committee moved to obtain inventory information on existing health education programs at St. Paul-Ramsey Hospital and in area health institutions. For medical education programs and for some allied health programs, this information was obtained in meeting reports (see Minutes 1/28/72; 8/18/72 and Documents 9, 12, 13, 16, 17). Through its cooperation with a recent study conducted under the auspices of the State Comprehensive Health Planning Agency, the Higher Education Coordinating Commission staff provided inventory information on allied health programs in all Minnesota institutions, as well as in hospitals (see Documents 24). This inventory includes a number of allied health education programs at St. Paul Technical-Vocational Institute, such as practical nursing for hospitals and institutions, medical laboratory assistant and others.

In sum, the Committee's review and evaluation charge remains partially fulfilled at this time. The Committee believes that this function is viable and necessary, and therefore should be continued.

3. Administration of Health Education Programs (851, Sec. 1)

The Committee remained cognizant of the force and wisdom in the University's original suggestions concerning an effective sequence for establishing an administrative structure. On December 24, 1970, (see Document 27, *University Position on St. Paul-Ramsey)* a stepwise approach was recommended.

1. Make "substantial progress . . . toward meeting current expenses of the core medical education programs already in existence." The aim was to relieve support "from monies collected from patients." The Committee applauded the resultant University budget request and the response of the Legislature when it reviewed the programs in medical education and family practice.
2. The Committee also noted that the Hospital "curriculum . . . is closely integrated with that of the Health Science Center in Minneapolis," and is a flexible base "to permit extensive educational innovation" and "development . . . of substantial autonomous clinical health science programs coordinated with the programs of the Health Science Center in Minneapolis."
3. Subsequent steps should be "establishment of a health science faculty organization," "development of substantially autonomous clinical undergraduate medical programs coordinated with the programs of the Health Science Center in Minneapolis," and inauguration of an "educational policy committee [related] to the office of the Vice President for Health Sciences."

For reasons previously mentioned, the Committee reviewed proposals for a structure and organization adequate to accommodate the developments requested by the Legislature. These proposals were developed by the governing bodies involved and the Committee reviewed the proposals, acted as a sounding board, and helped in convening the appropriate persons for thorough discussion of acceptable administrative arrangements.

In this respect, the four broad areas concerned relationships between the Regents and the County Commission, between the University health sciences administration and the hospital administration, between the various functions within St. Paul-Ramsey Hospital, and between area health education institutions.

During its deliberations the Committee discussed these types of relationships and reviewed the several reports germane to each (see Documents 5, 6, 10, 11).

The Committee can report its general satisfaction with progress in each area, particularly as this progress, in the opinion of the Committee, appears to be consistent with the legislative intent concerning educational development. At the same time, the Committee remains keenly aware of the critical nature of negotiations in each area so that educational development may be accomplished according to legislative intent. Consequently, the Committee urges a continued monitoring of this progress, at least during the coming biennium.

4. Planning and Development of Medical Education Saint Paul-Ramsey Hospital (851, Sec. 1)

The Committee reviewed the scope and plans for development of the programs at Saint Paul-Ramsey Hospital as prepared by the Saint Paul-Ramsey Hospital based faculty and endorses them (see Documents 5, 6). The Committee reviewed the development of the Saint Paul-Ramsey Hospital based faculty organization and approves the proposals to expand this organization to include other east metropolitan based University Health Science faculty.

The Committee reviewed the scope and plans for development of graduate training of Family Physicians at Saint Paul-Ramsey Hospital and recommends continued support by the Legislature.

The Committee reviewed a proposal to relocate the Gillette State Hospital to the Saint Paul-Ramsey Hospital site. The economies and efficiencies to the opera-

tion of both hospitals were noted. The Committee determined that such a move would provide an unique opportunity to strengthen and develop two existing Saint Paul Health Science education programs at minimal cost and recommends that the Legislature appropriate funds to finance its fair share of state service and health education expenses involved.

The Committee reviewed the effect of the appropriations of the 1971 Legislature of funds for undergraduate medical education at Saint Paul-Ramsey Hospital. The allocation of these funds by the University were determined to be in accordance with legislative intent. The principle was established that the funds were allocated to where the students were being educated. The Committee determined that this funding was indeed necessary to carry out the legislative intent and recommends that the 1973 Legislature continue financial support of undergraduate medical education at Saint Paul-Ramsey Hospital.

5. Utilization of Area Health Institutions (851, Subd. 3)

The Advisory Committee was able to stimulate a representative examination of the feasibility of utilizing area health institutions as to a coordinated, cooperative health education system in association with Saint Paul-Ramsey Hospital.

To this end, the Committee contacted the boards and chief administrators of each Saint Paul hospital and invited attendance at a special Committee meeting held at the State Capitol on August 18, 1972. (See minutes 8/18/72). The invitees were requested to report on existing health education programs. They were also apprised of the proposal for coordination and asked to comment (see Document 25).

The comments were generally favorable. Some institutions expressed reservations, seeking assurances of equitable participation and inclusion of all health education at all levels including vocational programs (see Minutes 8/18/72 and Documents 12, 13, 15, 16, 17, 26). Many felt that legislative support would be essential to success and that a coordinated approach to the Legislature would be most effective.

As a result, a joint meeting was held at Saint Paul-Ramsey Hospital on September 11, 1972. The Chairman of the Advisory Committee, Mr. Moore, advised the participants of the issues and urged inter-institutional cooperation. The participants agreed to establishment of an ad hoc committee to discuss the principle of cooperation and coordination. Subsequently, the ad hoc committee produced a resolution concerning coordination and a proposed structure for cooperation.

The resolution also stated that the Advisory Committee might be the appropriate vehicle to encourage further action to implement the resolution (see Documents 18, 21).

In effect, implementation would create an East Metropolitan Health Sciences Coordinate Campus. It would provide, expand and coordinate didactic and clinical health education opportunities in the Ramsey County area with staff and facilities now existing or proposed in the participating institutions. If the legislation remains in effect, this would be done mainly through "on-site administration, planning and development" provided by the Regents, but in a cooperative arrangement with the Ramsey County Hospital and Sanatorium Commission. This could not occur, however, without equitable participation of the area health institutions, if the ad hoc resolutions are implemented. One of the main functions of such an arrangement would be the presentation to the Legislature of a unified, systematic plan and request for funding.

In the temporary absence of a detailed proposal reflecting plans, organization, programs, resources and funding to implement an East Metropolitan Health Sciences Campus, the Advisory Committee endorses the substance and concept herein described which follows:

POLICY STATEMENT TO THE LEGISLATIVE ADVISORY COMMITTEE AS APPROVED OCTOBER 16, 1972

I. The subcommittee of the Legislative Advisory Committee met to consider the feasibility and the desirability of the formation of an East Metropolitan Area Health Science Campus. The Saint Paul hospitals represented were: United Hospitals, Inc., Saint Joseph's Hospital, Bethesda Hospital, Children's Hospital, Saint John's Hospital and Saint Paul-Ramsey Hospital.

II. This subcommittee agreed that it is desirable that an East Metropolitan Area Health Science Campus be established. It sees such an organization as being necessary to coordinate efficiently the efforts at undergraduate medical education in the medical centers presently involved. There is every reason to expect that this will be even more necessary in the future with the anticipated expansion of medical education and the need for larger clinical facilities thereby. It should be better able to develop programs to meet the newly emerging needs of the community.

III. The East Metropolitan Health Science Campus, in order to be viable, must be organized in a democratic fashion. The subcommittee feels that any hospital in this geographic area involved in medical education should have the opportunity to be represented in this body and must then have a participative voice in the decision-making process governing the group. The decisions involving both matters of educational content and direction,

and those of financing must be arrived at in this democratic manner. Whatever formula used to determine financing for undergraduate medical or other health career education must be applied equally to all participating medical centers. The decisions that direct the disbursement of such funds must take into account the capabilities and qualities of the centers under consideration. It is understood that no one institution will take over the identity of the Health Science Campus but rather that it will remain an amalgamation of all the centers involved.

IV. The subcommittee further expressed the conviction that if the East Metropolitan Health Science Campus is to redound to the benefit of all medical education in the community at large, it must have a voice in the decisions involving educational direction in Saint Paul and should have a voice at all levels of the Health Sciences. The details of this participation are left to be worked out by the parties concerned in the spirit of good will and cooperation, assisted by direction from the Legislature where it seems appropriate.

V. The subcommittee feels that the Legislative Advisory Committee represents an ideal vehicle for not only carrying these recommendations forward to the Regents but also to serve the purpose of answering the questions the Legislature will have when this matter is discussed before that body.

Epilogue

The Advisory Committee expresses its thanks to the Legislature for permitting this experiment to determine the feasibility of novel arrangements in delivery of all types of formal health education programs. In the opinion of the Committee, at least the feasibility has been demonstrated, and the Committee is gratified to have been a part of this effort.

In so brief a time span, it could not be expected that movement between feasibility and implementation could have been fully completed. Nevertheless, the Committee is confident that all signs of eventual success are present. If the Committee has stimulated a small part of this progress, its work has been well rewarded.

At the same time, the Committee is convinced of the continuing need, at least for the next biennium, of the functions it sought to serve: convener, reviewer and evaluator, stimulator and monitor. These functions pertain to organization as well as to programs and are in protection of the legislative intent. The Committee therefore urges that these functions be preserved.

Finally, the Advisory Committee commends and thanks the many individuals, institutions and organizations which aided and participated in its deliberations, and in particular the two governing bodies most directly affected: the University Board of Regents and the Ramsey County Hospital and Sanatorium Commission.

MEMBERS

ADVISORY COMMITTEE ON MEDICAL EDUCATION PROGRAMS AT ST. PAUL-RAMSEY HOSPITAL

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INVENTORY OF DOCUMENTS

The St. Paul-Ramsey Hospital Advisory Committee has received several documents from various members or people attending the meetings.

DOCUMENT 1 — 1969 Session Laws, 1971 Session Laws and Chapter 851—House File No. 1099.

DOCUMENT 2 — **Statement of Recommendations on Medical Education,** March 1971.

DOCUMENT 3 — Proposal for the **Establishment of a Medical Education Program** at the University of Minnesota, Duluth, October 1970.

DOCUMENT 4 — Family Medicine Residency.

DOCUMENT 5 — Flow chart presented by Dr. Perry on the faculty organization at St. Paul-Ramsey Hospital.

DOCUMENT 6 — **Proposed Constitution for Organization of University of Minnesota Health Sciences Faculty Members at St. Paul-Ramsey Hospital,** November 18, 1971.

DOCUMENT 7 — Current Activities in Medical Programs, St. Paul-Ramsey Hospital.

DOCUMENT 8 — A Proposal for Developing and Establishing **Regional Medical and Allied Health Education Centers,** Davitt A. Felder, M.D., President, NAME, January 1972.

DOCUMENT 9 — "Current Activities in Medical Programs, St. Paul-Ramsey Hospital."

DOCUMENT 10 — Letter to Mr. Ettel from John Milton, Cecil March and Robert Gumnit, M.D. plus a report on the relationship between the Hospital Commission and the Medical Education and Research Foundation, January 1972.

DOCUMENT 11 — Memorandum to Members of the Faculty Subcommittee on Long Range Planning from Robert J. Gumnit, M.D., Subcommittee Chairman, regarding Development of St. Paul Health Science Campus and an enclosure, June 7, 1972.

DOCUMENT 12 — Report to the Advisory Committee for St. Paul Health Science Campus from the Children's Hospital, St. Paul, August 15, 1972.

DOCUMENT 13 — Memorandum to Richard A. Moore, Chairman, from Jean D. Conklin, Administrator, Gillette Children's Hospital, regarding the St. Paul Health Science Campus, August 18, 1972.

DOCUMENT 14 — Letter to Mr. Richard A. Moore, Chairman, from George C. Power, Jr., United Hospitals, August 4, 1972.

DOCUMENT 15 — Letter submitted to the Higher Education Coordinating Commission from Kenneth J. Holmquist, Administrator, Bethesda Lutheran Hospital, August 18, 1972.

DOCUMENT 16 — Letter to Mr. Richard A. Moore, Chairman, from G. Theodore Mitau, Chairman, Education and Training Committee, regarding St. Paul Health Science Conference, September 22, 1972.

DOCUMENT 17 — Memorandum plus two enclosures to Richard A. Moore, Chairman, from S. W. Damberg, M.D., Chairman, Education Committee, regarding St. Paul Health Science Campus, October 5, 1972.

DOCUMENT 18 — Addendum to the Proposed Draft Statement to the Legislative Advisory Committee, October 1972.

DOCUMENT 19 — Memorandum to Members of the Advisory Committee on Medical Education Programs at St. Paul-Ramsey Hospital from Richard C. Hawk, Executive Director, Higher Education Coordinating Commission, regarding Advisory Committee Meeting at 10:00 a.m., November 24, 1971, dated November 9, 1971.

DOCUMENT 20 — Memorandum to St. Paul-Ramsey Hospital Advisory Committee on Medical Education Programs from Ronald A. LaCouture, Executive Administrator, NAME, regarding NAME Proposal for Development and Establishing Medical and Allied Health Education Centers, January 14, 1972.

DOCUMENT 21 — Memorandum to Representatives to the Legislative Advisory Committee of Various Metro Hospitals, from John F. Perry, Jr., Chairman, Faculty Steering Committee, St. Paul-Ramsey Hospital, regarding ad hoc Committee Meeting, October 9, 1972.

DOCUMENT 22 — Membership of Advisory Committee on Medical Education Programs at St. Paul-Ramsey Hospital.

DOCUMENT 23 — Letter to Mr. Rolland F. Hatfield, State Auditor from C. T. Johnson, Assistant Vice President at the University of Minnesota, May 22, 1972.

DOCUMENT 24 — Memorandum to Members of the Advisory Committee on Medical Education Programs at St. Paul-Ramsey Hospital from Dr. Donald P. Draine, Assistant Executive Director of Academic Planning, regarding Inventory of Allied Health Programs in Minnesota, November 7, 1972.

DOCUMENT 25 — List of invitees and copy of invitation Letter sent to various metro hospitals from Richard A. Moore, Chairman, July 14, 1972.

DOCUMENT 26 — Letter to Mr. Moore, Chairman, from S. W. Danberg, M.D. St. Joseph's Hospital, October 23, 1972.

DOCUMENT 27 — Letter to Dr. Draine, Director of Academic Planning, Higher Education Coordinating Commission, from Raymond Davoli, Assistant Principal, St. Paul Area Technical-Vocational Institute, November 16, 1972.

DOCUMENT 28 — **University Position on St. Paul-Ramsey,** December 24, 1970.

APPENDIX U

MINNESOTA HIGHER EDUCATION FACILITIES AUTHORITY ANNUAL REPORT

LETTER OF TRANSMITTAL

Mr. Jack Lynch, President, and Members of the
Minnesota Higher Education Coordinating Commission

The Minnesota Higher Education Facilities Authority is pleased to submit its first Annual Report for the period July 1, 1971 to June 30, 1972. The report provides a general analysis of the activities during the past calendar year.

During the past year, the Authority has received preliminary applications from eleven institutions for financing $21,890,800 of new construction, remodeling, or refinancing projects. Of these eleven institutions, seven have submitted formal applications and all other requested documents. Besides the eleven institutions submitting preliminary applications, another five colleges have made informal requests.

The Authority looks forward to being of continued service to the State of Minnesota and the higher education community.

Respectfully submitted,

Gerald A. Rauenhorst, Chairman

September 1, 1972

MINNESOTA HIGHER EDUCATION FACILITIES AUTHORITY
ANNUAL REPORT

THE AUTHORITY

The Minnesota Higher Education Facilities Authority is a state administrative agency created to provide additional educational opportunity for the people of the state and for the purpose of alleviating the pressing demands upon tax supported colleges and universities by assisting nonprofit institutions of higher education in Minnesota to build needed facilities at a lower interest cost than might otherwise be available to them. The Authority was created by Chapter 868 of the Minnesota Laws of 1971. It does not make any facility grants, and has access to capital improvement funds only through borrowing. All borrowed funds obtained by the Authority must be repaid through rentals charged the participating institution.

The academic and other facilities built by the Minnesota Higher Education Facilities Authority must be financed by the sale of revenue bonds by the Authority. In turn, the Authority will have to enter into lease agreements whereby an institution will pay rent to the Authority in the amount needed to retire the Authority's debt.

Since the Authority is an agency or instrumentality of the state of Minnesota, the interest paid by the Authority to bond holders is exempt from federal and Minnesota income tax under the present provisions of law. Bonds providing income tax free interest normally sell on the market at a lower rate of interest than other bonds.

The use of the financing arrangements for facility construction made possible by the existence of the Minnesota Higher Education Facilities Authority is entirely voluntary. No institution is required to enter into agreement with the Authority. The Authority desires to assist institutions of higher education to the extent each institution wishes to take advantage of its services.

MEMBERSHIP

The Authority is comprised of seven members, one of whom is the Executive Director of the Minnesota Higher Education Coordinating Commission and six of whom are appointed by the Governor with the advice and consent of the Minnesota Senate. The Directors are:

Gerald A. Rauenhorst, Chairman
term of office expires January 1, 1977

Bernard P. Friel, Vice-Chairman
term of office expires January 1, 1977

Richard C. Hawk
ex officio Member and Secretary

Robert W. Freson, Member
term of office expires January 1, 1975

Earl R. Herring, Member
term of office expires January 1, 1973

Norman Perl, Member
term of office expires January 1, 1975

Michael Sieben, Member
term of office expires January 1, 1973

The Authority appointed Joseph E. LaBelle as its Executive Director, the law firm of Faegre & Benson as its bond counsel and Springsted, Incorporated as its fiscal agent.

FINANCING FOR INSTITUTIONS OF HIGHER EDUCATION

During the last fiscal year the Authority has received requests from 11 institutions for financing $21,890,800 of new construction, remodeling, or refinancing projects. Projects submitted from three colleges have been given formal approval and are progressing rapidly to the stage of bond sales. Projects from another four colleges are presently being formally reviewed. Refinancing projects from two institutions are being temporarily delayed. A project submitted by Villages Housing Association (an organization controlled and managed by a student group at Southwest State College in Marshall, Minnesota) was denied because the Association is not eligible to participate in the program. Only higher education institutions are eligible.

Projects Formally Approved

$2,075,000 Housing Project of Augsburg College

The project will provide apartment type housing for 300 students in 100 dwelling units. The project, which will be a part of a student housing program, will serve not only students at Augsburg College, but also of St. Mary's Junior College, St. Olaf College's four-year nursing program taking their clinical work at Fairview Hospital, and students in the Fairview Hospital three-year diploma program. $1,925,000 is for construction of the building and $150,000 for the completion of acquisition and demolition of properties required for the provision of related off-street parking. This project is required primarily to maintain the institution's ability to serve its existing student body through replacement of substandard facilities.

$1,500,000 Housing Project of Bethel College

Bethel College is currently completing a move of its campus to a new 214-acre site in Arden Hills. The project being financed through the Authority consists of two clusters of seven townhouse type buildings housing 480 students in apartment type facilities. Each building has six apartments that provide space for six students per apartment, two per bedroom. One building will house a commons area as well as laundry facilities. Another will house a central student housing service. The buildings are all designed to blend esthetically with the hilly, heavily wooded landscape of the college campus.

$500,000 Housing Project of St. Mary's College

The project consists of a village of seven buildings, each containing four apartments. Each apartment contains a living room, two bedrooms, a three-compartment bathroom and an efficiency kitchen. Each apartment houses four students and each building houses 16 students with the exception of a two-man apartment for faculty advisors. The total village capacity is 108 students, mostly upperclassmen. The need for additional housing is due primarily to an increased enrollment. The village type student housing was proposed to offer a viable alternative to the traditional dormitory structures presently housing the majority of the student residents.

Projects Awaiting Formal Approval

$1,276,000 Project for the College of St. Benedict

The project consists of four distinct building programs. The largest project consists of 30 units of two bedroom apartments for housing 120 students. The second part of the project consists of $107,000 for renovation of the Home Economics Department serving 350 students. The third part is a $171,000 renovation of the present dining facilities. The fourth building program is the construction of a new $265,000 indoor swimming pool addition to the Physical Education building. These new facilities are needed to accommodate the dramatically increased enrollment as well as to improve the old substandard structures on the campus.

$7,000,000 Project for the Minneapolis College of Art and Design

The project consists of a new teaching facility, remodeling existing facilities, land acquisition and equipment for the project. The new facility is being designed by Kenzo Tange of Tokyo, Japan, one of the world's foremost architects and urban designers, as a part of a major arts complex, which includes the Minneapolis Institute of Arts and a theater for the Children's Theatre Company of the Minneapolis Institute of Arts. The new building is comprised of three major zones of activities: (1) technical laboratory zone, (2) student work zone, and (3) academic zone. Each of these zones is linearly organized and are parallel to the others. The project will allow an increase in size of the student body from 475 to 600.

$415,000 Housing Project for the College of St. Scholastica

The project consists of six four-plex housing units. Each unit will have four students in each apartment for a total of 16 in each four-plex and a total of 96 students in all six housing units. The units will be built in a factory, brought to the site and assembled on the foundation. Each apartment unit will have approximately 800 square feet, or 200 feet per student.

$1,450,000 Project for Gustavus Adolphus College

The project consists of two building programs. The first program involves a new $425,000 administration building and an additional $175,000 for equipment including a Univac Computer. This building is a two-story, fully air-conditioned office building containing 18,500 square feet and will bring into one building all administrative offices previously dispersed throughout the campus. The second building phase involves a remodeling of the old library into a social science classroom. This remodeling will bring together all social science classrooms and faculty offices within one structure. When completed, the college will have classroom facilities in permanent type buildings for 2,200 students. The remodeled social science building and its refinancing will cost $850,000.

MINNESOTA HIGHER EDUCATION FACILITIES AUTHORITY REPORT OF EXPENDITURES

FISCAL YEAR 1972

EXPENSES (November 1, 1971 to June 30, 1972)

Full-Time Employees	$15,765.87	
Appointed Commission	770.00	
Sub-Total		$16,535.87
Rents and Leases*	1,116.88	
Repairs and Maintenance	70.03	
Printing and Binding*	481.71	
Non-State Employee Service	267.94	
Tabulating Service	—	
Sub-Total		1,936.56
Communications	703.22	
Travel and Subsistence	265.95	
Other Contractual Services	—	
Sub-Total		969.17
Stationery and Office Supplies	239.86	
Scientific and Educational Supplies	185.12	
Sub-Total		424.98
Contributions	1,204.58	
Insurance	236.80	
Sub-Total		1,441.38
TOTAL		$21,307.96

*Estimates: Rents and leases may be adjusted downward; printing and binding may be adjusted upwards.